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CHAPTER 6, ACTS OF 1995 COMMISSION

Chapter 6 of the Acts of 1995

Commission Report and Recommendations

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Chapter 6 of the Acts of 1995 Commission
June 1, 1995

Governor William F. Weld
Senate President William M. Bulger
Speaker Charles F. Flaherty
Commonwealth of Massachusetts
The State House
Boston, Massachusetts

Dear Sirs,

The Chapter 6 of the Acts of 1995 Commission is pleased to present the recommendation regarding the development of a convention center and sports facility complex. For the past three months the commission has studied the issues relating to the need, siting and financing of a combined convention center/sports (football) facility and a stand alone ball park (baseball).

Our recommendation is based on knowledge gained through relevant analyses and site visits outside the commonwealth, comprehensive review of five potential sites within the commonwealth and the study of pertinent transit, transportation and environmental data.

We sincerely appreciate your leadership and guidance throughout. We believe that our collective decision to support a full facility incorporating a convention center and new home for the New England Patriots in addition to a new facility for the Boston Red Sox will allow Boston and the commonwealth to retain its reputation as a premier city and popular destination.

In closing we would like to extend our sincere gratitude to all agencies and individuals who assisted us along the way. We look forward to pursuing our final task of passing the appropriate legislation to fulfill our goals.

Respectfully,

Senator Robert E. Travaglini
Co-chairman

Representative Kevin W. Fitzgerald
Co-chairman

Chapter 6 of the Acts of 1995 Commission Members

Senator Robert E. Travaglini - co-chairman
Representative Kevin W. Fitzgerald - co-chairman

Senator Thomas Birmingham
Representative Paul Casey
Senator Robert Havern
Mr. Francis Joyce
Representative Peter Larkin
Ms. Marisa Lago
Senator Brian Lees
Senator Linda Melconian
Representative Joseph Sullivan
Representative Michael Sullivan
Mr. Stephen Tocco

Commission Note

The commissioners relied on several reports mentioned within this report and retained or utilized the services of numerous consultants and government employees to advise them on the many tasks with which they were faced.

While they carefully examined all of the information provided, it was ultimately the experience and judgment of the commission members which led them to their collective judgment. This report is based upon that collective judgment.

In some instances the commission adopted language verbatim from some of the studies. For simplicity sake and because of time constraints no footnotes or references have been provided. In other instances the commission disregarded the findings and recommendations of studies and consultants because such findings and recommendations were based on incorrect assumptions, current realities different from the study's basic assumptions, conflicting information or because the information, experience and belief of the commission members differed from the studies and advice they were receiving.

It has always been the stated objective of the commission members to sift and weigh all information presented to them. But it is ultimately their responsibility to decide the best course of action to be taken pursuant to their mandate in Chapter 6.

REPORT

On February 10, 1995, Governor Weld signed into law Chapter 6 of the Acts of 1995 (See Appendix A). This legislation was entitled An Act relative to Development of Convention Facilities in the Commonwealth and included the following findings:

"It is hereby found and declared that the construction of a new convention center located within the city of Boston will enhance the city of Boston and the commonwealth overall and prevent the creation of any blighted open areas which would be detrimental to the safety, health, morals and welfare of the community.

It is hereby further found and declared that the construction of a new convention center in the city of Boston will: (1) induce large-scale national and international conventions, trade shows and meetings which cannot be accommodated at the existing Hynes Convention Center to locate and conduct their activities and business within the commonwealth; and (2) promote the prosperity and general welfare of all citizens of the commonwealth by increasing gainful employment, increasing the tax base of the commonwealth, and encouraging investment within and around the city of Boston as well as the commonwealth generally.

It is hereby further found and declared that a new

convention center complex, and the resulting public benefits, would not occur solely by the operation of private enterprise and financing and that public financing of a convention center complex to some extent is essential for the creation of such a facility."

Chapter six provided for the creation of a select special commission whose task would be to use its collective judgment to recommend a site from a circumscribed list and to develop financing alternatives for the design, costs, development and construction of a new convention center containing not less than six hundred thousand square feet of exhibition space in the city of Boston.

As part of its review, the commission was charged with the task of examining all concomitant issues relating to the construction of an integral fixed-seating component as part of the new convention center, or of a stand alone stadium, either of which would have a capacity of seventy thousand spectators and could be used for multiple purposes.

In regard to the development of a stadium facility the commission was charged with the task of exploring potential cooperative and financial participation with the New England Patriots and the Boston Red Sox.

The commission was required to consider in its deliberations

regarding the siting and development of a convention center eighteen separate issues. Likewise, in regard to its examination of the need and cost of developing an integral fixed seating component or separate stadium facility the commission was required to consider eight separate issues. Finally, the commission was charged with the tasks of conducting environmental, traffic and parking and geotechnical studies and examining public and private financing options.

The Boston Redevelopment Authority and the Massachusetts Convention Center Authority were called upon to lend their expertise to the commission and make recommendations pertinent to the tasks of the commission. The commission was specifically authorized to consider the recommendations but was not to be bound by them.

The legislation set an aggressive target date of June 1, 1995 for a report from the commission and recommended legislation to further its goals.

The Chapter 6 Agenda

In order to acquire the information necessary to comply with its mandate and meet its deadlines, the commission established a very ambitious schedule of open public meetings to hear testimony and take necessary votes, working meetings of small groups of the commission members and staff to clarify issues and complete

logistical tasks and to develop a travel schedule to visit and explore the five sites specifically proposed by chapter 6 and to visit seven cities with recently developed convention centers and stadiums.

The commission divided its agenda into four separate phases:

Phase I.

This phase was utilized for education, site visits and presentations. This period of time allowed commission members to be exposed to ideas, plans, development scenarios, public policy questions and studies which had been previously submitted. Site visits were undertaken to Baltimore, Chicago, St. Louis, Indianapolis, Atlanta, New Orleans and Cleveland where civil, business and sports leaders shared their successful experiences and their problems.

Presentation for five potential sites within the commonwealth were made including all the sites circumscribed by chapter 6.

Phase II

This phase was utilized for data collection and establishing basic consensus among commission members. This was achieved by creating four sub-committees which moved on parallel tracks with assignments necessary to produce an over all work plan. The four subcommittees created were:

1. Site selection
2. Fiscal
3 Sports
4 Policy and Presentation.

Phase III.

The third phase was used to discuss the subcommittee findings, and to draft a final report and legislation to further the committees recommendations.

Phase IV.

The fourth phase will be used to secure passage of legislation and monitor the progress of the project. The commission will be available to assist with further legislative details or to assist in any way to accomplish the building of a facility.

As a starting point for its study, the members of the Chapter 6 commission were provided with three separate comprehensive reports dealing with the desirability of developing a new convention center facility and the feasibility of combining it with a stadium facility.

The firm of Coopers & Lybrand led a project team commissioned by the Executive Office of Economic Affairs to perform an analysis of potential options related to the development of stadium and/or exhibition facilities within the commonwealth which was presented in February of 1993.

The firm of Price Waterhouse was hired by the Massachusetts

Convention Center Authority to conduct a development analysis for additional exhibition space in Boston which was completed in two phases and submitted in September 1993.

In 1994, Mayor Thomas M. Menino of Boston instructed the Boston Redevelopment Authority to conduct a comprehensive study of potential sites in Boston and the issues of siting a new convention center and football stadium in Boston. This report was completed in October of 1994.

These three reports provided a wealth of background data to commission members and confirmed the findings of chapter 6 of the Acts of 1995 that the construction of a new convention center in the city of Boston was not only desirable, but also necessary for the continued growth of the commonwealth's employment and tax base and as a spur to encouraging other investment. Members of the commission also were convinced that the development of such a facility would not take place without some public financing. Thornier problems were presented by the following three issues: whether or not an integral fixed seating component or stand-alone stadium facility should be included as part of such complex; where to site a complex; and how to finance the development.

The Case for a Convention Center.

The simple reason for government support of the convention and trade show business is that such business generates

tremendous benefits to the commonwealth's economy. Visitors from other states travel to Boston where they stay in hotel rooms, eat their meals in restaurants, ride in taxicabs, shop in retail stores, visit local museums and tourist attractions and enter and leave the city by the use of airlines situated at Logan airport. Studies have shown that many of these visitors bring their spouses with them and extend their stay by vacationing in other parts of the state. The dollars spent are brought from outside the state and left here to boost our economy and increase tax revenues.

Boston is blessed with tremendous advantages when it seeks to attract convention and trade show meetings. The city of Boston is viewed as a prime destination which people want to visit. It has a large number of first class convention hotel rooms, a high occupancy of Class A commercial office space, a large center city residential population, and relative ease of access through Logan airport from across the country. The Hynes Convention Center has a reputation for a professional staff which provides high quality services and above average food and beverage services. These advantages have caused the Hynes Convention Center to operate at nearly maximum practical capacity. In fact the Hynes Convention Center has one of the highest occupancy rates of any convention center in the country,

but is too small (193,000 square feet of exhibition space) for a growing number of shows and conventions that would like to come to Boston but either their size requirements or requested dates cannot be accommodated. In addition, some trade shows that are at the Hynes now are expanding and are expected to outgrow the facility.

While Boston is beginning to lose its competitive spot in attracting prime business because of the size of its facility, market demand is projected to increase according to one conservative estimate at six percent - compounded annually.

It is clear from all studies that the market exists and will likely expand for a large exhibition convention center in the city of Boston.

To attract this market Boston must add space which is sufficient to accommodate larger, new shows; to handle two or more shows simultaneously; to retain past customers which have outgrown space available at Hynes; to attract new shows requiring move in/move out on-grade and shows requiring more than one hundred thousand square feet of contiguous space. As an additional recommendation to attract this market the Massachusetts Convention Center Authority urged the commission to include a provision in any development for a minimum fixed seating component for at least ten thousand spectators to

accommodate the opening and closing and special meetings of some of the largest conventions and trade shows.

With these minimum requirements in mind the commission was faced with making a decision as to the desirable size of a convention center facility and the configuration of its space.

The above referenced reports and recommendations considered by the commission members varied in their assumptions and conclusions as to the optimum size and configuration of a new convention center facility.

The members of the commission were guided in their choice of size and configuration by a desire to build a facility large enough to capture the highest percentage of possible business at reasonable cost. Beyond a certain point a larger facility will yield a diminishing return in terms of the number of attendees that it attracts into the region, a critical factor in determining economic impact. This occurs because, after a point, the largest shows take up more exhibition space but do not bring in proportionally more people.

The commission decided that the appropriate size of prime exhibition space in any complex should be 650,000 square feet. This amount of space would be able to capture at least ninety-five percent of the market for traveling or rotating conventions and trade shows.

In addition to the necessity of choosing a site that could accommodate a facility this size the commission members, as part of their deliberations decided to include as an added criterion: the ability of any site to accommodate future expansion of a convention facility. This component of the site selection was dictated by a study of market trends and the experience of studying the development of convention centers in other cities.

Having made a decision as to the appropriate amount of exhibition space to develop as part of a new convention center, the commission turned to the task of deciding whether an integral fixed seating stadium component or stand alone stadium should be included as part of any development.

The commission unanimously recommended by its vote of April 19, 1995, to pursue the option of developing a domed stadium with a fixed seating capacity of seventy thousand spectators and approximately two hundred thousand square feet of exhibition floor space as part of a convention center complex. The commission's vote included two provisos: (1) that the domed stadium be shown to be financially feasible; and (2) that it does not impose significant adverse impacts on the surrounding neighborhoods.

The members of the commission arrived at their decision to pursue this option based on many factors. The first and foremost

reason is that the building of a domed stadium as part of a convention center facility will have a direct and substantial impact on the economy of Massachusetts.

The preservation of the New England Patriots professional football franchise in the commonwealth and its relocation to the downtown area in a new stadium with greater capacity will generate increased spending and the creation of a number of new jobs. Both the Price Waterhouse report and the Coopers & Lybrand report, although using different assumptions, predicted that a more competitive franchise with a larger capacity in the downtown area would generate increased spending in the local economy and would increase tax revenue to the commonwealth in four primary areas: sales tax, meals tax, income tax and room occupancy tax. Other sources of revenue which will contribute to an increased fiscal impact include taxes on motor fuels, cigarettes, insurance, alcoholic beverages and corporations.

Commission members were aware that a large proportion of these benefits currently accrue to the commonwealth because of the location of the New England Patriots in Foxboro. The decision to include a large stadium component as a part of a new complex has been viewed as an opportunity to retain and enhance those benefits while utilizing the New England Patriots franchise as a private funding source to help pay for a portion of the

costs of developing the entire complex. Commission members, aided by Mr. Paul Much of Houlihan, Lokey, Howard and Zukin, recognize that not only do the benefits accrue directly to the commonwealth in terms of revenue but equally as important to the restaurants, retail stores, transportation businesses and the hotel/motel business sector. Currently thirty-three percent of the New England Patriots fan base resides outside of the commonwealth. With the relocation to downtown Boston in a state of the art facility with additional seating capacity, these economic benefits will expand.

In addition to these reasons the commission decided to endorse a full megaplex development because such a development could accommodate more convention and exhibition event potential as compared to a stand alone convention center, due to the variety of types of exhibition space and the large plenary seating area associated with the stadium component of the project.

These events include an expected Super Bowl in the year 2001, NCAA Final Four Tournaments and National Political Conventions. The estimated spending in the Commonwealth of Massachusetts from the Super Bowl alone is estimated to be in the range of two hundred million dollars (1995 dollars).

If the NCAA Final Four is held in Boston estimated spending

in the commonwealth could approximate fifty-five million dollars (1993 dollars).

Another reason commission members have articulated for support of the full megaplex development is that the massing in one area of a convention center, attached domed stadium, and with the cooperation of the Boston Red Sox, a new state of the art baseball stadium, would likely provide the greatest collateral and ancillary development opportunities for the surrounding areas and serve to attract national or international corporations who would help to directly finance the full scale development.

The Boston Redevelopment Authority has estimated that the convention center alone would create a demand for as many as 1646 new hotel rooms by the year 2000. This is expected to double within the following decade, up to a total of approximately 3259 new hotel rooms by the year 2010. This hotel development would not be absorbed by Boston alone, but by other municipalities as well. The Boston Redevelopment Authority estimates that approximately forty-three percent of new hotel occupancy would occur in Boston and the remaining fifty-seven percent in other cities and towns.

Commission members believe that a significant portion of the new hotel space, which the Boston Redevelopment Authority has predicted will occur within the city of Boston, would occur near

the new megaplex and baseball stadium development which will create more foot traffic and demand for retail, restaurant and other tourist related activities and development.

The net effect of such concentrated development would offer potential operational efficiencies as well as reducing the necessity and cost of infrastructure improvements and mass transit needs.

Finally, the development of a full megaplex facility and stand alone baseball facility will help Boston maintain its status as one of America's premier cities. Initially, by its decision to take a bold step by building this complex and project, and thereafter as a host city for the large scale events which will occur, Boston and the commonwealth will receive a substantial national and international exposure and visibility.

For all these reasons, the members of the commission endorse unanimously, the development of a full megaplex and stand alone baseball facility and structured parking enhanced by public transit and transportation. The commission members are emphatic in their recommendation that if any portion of the development cannot be accomplished then no individual portion of the development shall go forward.

Site Selection

The members of the commission chose to decide the issue of

what to build before they could decide where to build. The decision to recommend a combined convention center facility with an attached fixed seating component, space for a baseball stadium and room for expansion necessarily eliminated several sites from further consideration.

The commission at its public meeting of April 19, 1995 formally voted to limit the site selection process to what would eventually become the Summer Street Site in South Boston and the Crosstown site in Roxbury. The Northern Avenue Site, the existing Hynes Convention Center and the South Bay site were viewed as being too small and perhaps too complicated to permit the development of the full proposal outlined by the commission.

Choosing between the two remaining sites became an inordinately difficult task for the members of the commission. Nevertheless the commission voted to endorse the development of the megaplex on the Summer Street Site and a new open air baseball stadium near Fort Point Channel in Boston. The Summer Street Site which is closer to downtown Boston and part of Boston's historic waterfront, has been viewed by the Massachusetts Convention Center Authority as more likely to enhance the convention center's marketability and was strongly preferred by the Boston Red Sox and advocated by the city of Boston which had previously targeted this area for tourism

related development.

The Massachusetts Convention Center Authority and the Boston Redevelopment Authority felt strongly that in addition to the marketability issue, the Summer Street Site should be chosen because of its accessibility to downtown Boston, the site's ability to attract other economic development such as hotels, businesses and restaurants and the site's compatibility with existing uses and the future plans for this part of the city. (See Appendix B for complete description of Summer Street Parcel and related issues.)

Commission members are currently reviewing potential costs associated with preparation, environmental impact problems and geotechnical concerns. Since the cost of land and traffic and service infrastructure modifications and improvements are significant at any urban site, the commission has redoubled its efforts to develop a financial package that will make it feasible.

Clearly the members of the commission were influenced by the city's commitment to support the development of an entire megaplex facility on the Summer Street Site, but only if financially feasible there. Likewise members viewed the Boston Red Sox' clear preference of this site and willingness to participate as an opportunity not only to have them as private

partners in the development but also as a way to attract other large scale corporate participation. Members felt that the financial cooperation of the Red Sox organization and commitment of the city of Boston would help to address the costs associated with this site.

The Crosstown Site while finishing second to the Summer Street Site appealed to many commission members for a number of reasons. The private developer proposing this site argued that the site provided lower land acquisition costs, simple infrastructure needs and strong community support. He also argued that the size and shape of the proposed parcel would provide flexibility in accommodating all the components of the combined facility.

Economic and Fiscal Benefit

The underlying basis for any decision to proceed with a project of this magnitude is that such development will provide sufficient fiscal and economic benefits to warrant the investment of public dollars. The commission believes that this project is so warranted.

These benefits have been quantified by the various studies and consultants relied upon by the commission. While the estimated value of such benefits varies widely from study to study based on differing assumptions, certain effects are agreed

upon in general.

Facility construction increases employment for those working directly on the project and for those firms which supply related construction materials. Also, construction spending will be spread over a longer period of time after completion of the development because of the predicted ancillary development, i.e. new hotels, entertainment complexes etc., which are expected to occur well into the first decade of the twenty-first century.

The other most significant direct spending benefit to the commonwealth's economy, and one which will be ongoing, is spending by convention and trade show delegates and stadium attendees. A new convention center as well as new football and baseball facilities will attract event attendees from outside the local area to make purchases in hotels, restaurants, retail and other visitor industries.

These direct spending benefits include a significant increase in economic activity in the greater Boston area, which will result in direct increases in state revenues, in several categories of existing taxes at current rates. The most direct benefits arise from increased hotel occupancy in existing hotels and new hotels which can reasonably be anticipated to be built, which result directly in increased hotel tax revenues, at the current rate of 5.7%. This increase in hotel tax revenue is

estimated to be $6.6 million per year.

In addition to the increased hotel tax revenue the commonwealth will realize from the new hotels and increased occupancy of existing hotels, the commonwealth will realize approximately $6.2 million increased meals and sales taxes. As mentioned above, both of these categories of increased receipts will be paid for by out-of-state conventioneers or spectators.

Finally, there will be increased income tax revenue from the increased employment which will result from the anticipated increase of five hundred thousand visitors per year. This increase in employment will be in the form of overtime hours and pay for employees in existing positions, as well as new hiring which is anticipated in service activities directly related to the increased volume of visitors, as well as business serving the convention, tourism and entertainment business, such as electricians and laborers. The increase in income tax receipts is estimated to be $10.1 million annually.

All of the direct increases in receipts from existing revenue streams are based on steady state estimates of increased economic activity, after the new facility has been operational for a few years. In addition, the construction of the facility will generate a significant number of jobs for the building trades. Over a two to three year period the project could be

expected to produce a total of 2,000 jobs, produce 175 million dollars of construction payroll during the life of the project, and return 8.4 million dollars to the state treasury during the life of the project in direct income taxes.

There will also be substantial benefits from events which are expected to occur periodically, such as the Super Bowl. NFL officials estimate that the total spending experienced by a host region is two hundred million dollars. Assuming a 5% tax rate, on average, from this activity, the commonwealth would realize over ten million dollars from this single event. Other large periodic events, such as political conventions would also produce significant short term increases in economic activity.

Significant economic benefits can be expected beyond the greater Boston area, as well. Through close cooperation with the regional tourism councils, persons traveling to Boston for trade shows and professional conventions will be offered the opportunity to spend a few days before or after their Boston stay visiting other regions of the commonwealth, such as Cape Cod or the Berkshires which will give all the regions of the state considerably more exposure to potential repeat business than they would get otherwise.

In addition to the direct spending benefits listed above there is an indirect effect of bringing new dollars into our

economy from other areas. That effect is the result of the respending of the initial or direct expenditure. The total impact generated is estimated by applying what is termed a "multiplier" to the initial expenditure in order to account for the total economic impact of the responding activity. While the multiplier effect is of great significance to a healthy economy the commission has chosen to note its effect without predicting how much it will mean to our enhanced economy.

Recommendations

The commission concludes and recommends the following:

1. The commission recommends the construction of a multi-purpose convention center and integrated sports facility and an open air stand alone baseball stadium (the "Development").

2. The commission recommends that a multi-purpose convention center and integrated sports facility with a minimum seating capacity of seventy thousand fixed seats be sited on the parcel referred to as a portion of the Summer Street Site.

3. The commission recommends that an open air stand-alone baseball stadium be constructed on a site referred to as the Fort Point Channel Site.

4. The commission recommends that such Development proceed by means of a public private partnership between the Commonwealth of Massachusetts and the New England Patriots and a public private partnership between the Commonwealth of Massachusetts and the Boston Red Sox.

5. The commission recommends that the Commonwealth of Massachusetts continue to seek other interested private corporations regarding sponsorship, direct investment and other financial participation.

6. The commission recommends that such Development proceed

by public land assembly and permitting and the use of the design/build construction format to be started by the issuance of a request for proposals to be issued by the Massachusetts Convention Center Authority.

7. The commission recommends a fiscal package for such Development which shall include: general obligation bonds and revenue bonds with revenue producing fees to be paid from hotel/motel accommodations, auto rentals, cruise and trolley tours, ticket surcharges on project related sports and entertainment events, parking (constructed for project) surcharges on and leases with the New England Patriots and the Boston Red Sox. The revenue bond structure may utilize a lease financing arrangement with privately arranged construction financing.

8. The commission recommends that if any portion of the Development cannot be accomplished because of lack of financial feasibility or a significant adverse community impact, then no individual portion of the Development shall go forward.

If the provisions of this act conflict with the provisions of any other general or special law, the provisions of this act shall supersede said conflicting provisions.

The department is hereby authorized and directed to expedite the acquisition of federal waiver and amendment approvals and the adoption of necessary statutory amendments in close and continuous coordination with appropriate federal officials, and to prepare and submit completely and in a timely manner all forms and data required by such federal officials. If changes other than those made by this act are required to gain waiver approval, the department shall seek amendments to state and federal statutes that are necessary to obtain said approval. The executive office of health and human services and the department shall, as soon as practicable, apply for and otherwise seek to obtain all exemptions and waivers from and amendments to federal statutes, rules and regulations necessary to implement the provisions of this act, at the earliest possible date.

Upon obtaining all such exemptions, waivers and amendments referred to herein, the department shall adopt such changes to current rules as may be required to implement the provisions of this section.

The department is hereby further authorized and directed to file with the house and senate committees on ways and means a copy of each such waiver application filed with the federal government, copies of correspondence to and from the federal government explaining and elaborating upon said applications, and final documentation of any waivers granted by the federal government upon their receipt. The department shall further file with said committees an explanation of how any waivers granted by the federal government will be implemented.

SECTION 141. Each provision of this act, shall, regardless of whether it includes a specific proviso, be subject to federal approval, if required, and federal financial participation. In any case in which the state fails to receive a waiver for any said provision of this act or otherwise would fail to receive federal financial participation in the implementation of such provision, then such provision shall not be implemented unless the full amount required for said implementation without federal participation is appropriated for said implementation.

SECTION 142. Any provision of this act that is inconsistent with federal law or regulations shall be void unless the department receives an exemption or waiver from the federal government to implement said provision.

SECTION 143. This act shall take effect upon its passage.

Approved February 10, 1995.

BOSTON, CITY OF—CONVENTION CENTER

CHAPTER 6

H.B. No. 1443

AN ACT relative to development of convention facilities in the commonwealth.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. It is hereby found and declared that the construction of a new convention center located within the city of Boston will enhance the city of Boston and the commonwealth overall and prevent the creation of any blighted open areas which would be detrimental to the safety, health, morals and welfare of the community.

It is hereby further found and declared that the construction of a new convention center in the city of Boston will: (1) induce large-scale national and international conventions, trade shows and meetings which cannot be accommodated at the existing Hynes Convention Center to locate and conduct their activities and business within the commonwealth; and (2) promote the prosperity and general welfare of all citizens of the commonwealth by increasing gainful

employment, increasing the tax base of the commonwealth, and encouraging investment within and around the city of Boston as well as the commonwealth generally.

It is hereby further found and declared that a new convention center complex, and the resulting public benefits, would not occur solely by the operation of private enterprise and financing and that public financing of a convention center complex to some extent is essential for the creation of such a facility.

SECTION 1A. To provide for supplementing certain items in the general appropriation act for the fiscal year ending June thirtieth, nineteen hundred and ninety-five, the sums set forth in section two are hereby appropriated for the several purposes and subject to conditions specified in chapter sixty of the acts of nineteen hundred and ninety-four and subject to the provisions of law regulating the disbursement of public funds and the conditions pertaining to appropriations in said chapter sixty for the fiscal year ending June thirtieth, nineteen hundred and ninety-five; provided, however, that the sums so appropriated shall be in addition to any amounts made available for said purposes.

SECTION 2.

1599–9955	For the costs associated with conducting the studies provided by section three of this act; provided, however, that the amount appropriated shall be transferred no later than ten days after the effective date of this act to the Massachusetts Convention Center Authority for the purposes stated herein; and provided, further, that any remaining balance after the completion of the requirements stated herein shall be transferred to the General Fund	$1,000,000

SECTION 3. There shall be established a thirteen person commission to make formal recommendations and to file proposed legislation for the selection and acquisition of the site, design, costs, development and construction of a new convention center containing not less than six hundred thousand square feet of exhibition space to accommodate large-scale national and international conventions and trade shows. Said commission shall consist of one person appointed by the governor, the executive director of the Boston Redevelopment Authority, the executive director of the Massachusetts Convention Center Authority, five members of the house of representatives to be appointed by the speaker of the house of representatives and five members of the senate to be appointed by the president of the senate. Section two A of chapter four of the General Laws shall not be applicable to said commission. Seven members of the commission shall constitute a quorum and a majority of all members present and voting shall be required for any action voted by said commission, including, but not limited to, voting on formal recommendations or proposed legislation. The chair of the commission shall be selected by the members thereof.

The commission shall include, but not necessarily limit its review, analysis and consideration to the following sites: (*a*) the "C" Street site in the Fort Point channel district of the city of Boston; (*b*) the Northern avenue site in the Fort Point channel district of the city of Boston; (*c*) the existing Hynes Convention Center; (*d*) the South Bay site; and (*e*) the Massachusetts Avenue/Crosstown site, as each are further identified in an interim report prepared by the Boston Redevelopment Authority entitled "Boston's New Exposition Center and Stadium" dated October 4, 1994.

The commission, as part of its review, analysis and consideration of each site, shall focus on the following issues and impacts:

(1) whether the site is appropriate to build a convention center having the design and amenities necessary to attract large scale conventions and trade shows;

(2) whether the site is large enough to construct a convention center of at least six hundred thousand square feet of exhibition space;

(3) whether the site is accessible to transportation, hotels and other attractions;

(4) whether the site is accessible to pedestrians;

(5) whether the site is publicly or privately owned; if privately owned, the number of different owners;

(6) whether use of the site for a convention center would result in displacement of any businesses, homeowners and tenants;

(7) whether use of the site's use as a convention center would result in any loss of jobs presently on the site;

(8) whether the site would attract other economic development to its area, such as hotels, businesses, restaurants, etc.;

(9) whether the site enhances the convention center's marketability;

(10) whether use of the site results in any loss of tax revenue to the city of Boston;

(11) whether the site presents any preparation concerns;

(12) whether the site presents any environmental concerns;

(13) whether the site presents any geotechnical concerns;

(14) whether the site would require any traffic and service infrastructure modifications and improvements;

(15) whether the site would have an adverse impact on adjacent neighborhoods regarding traffic, noise and other quality of life issues;

(16) whether use of the site as a convention center would be compatible with the existing uses and future plans for the adjacent neighborhood;

(17) whether the site would provide an opportunity for future expansion; and

(18) the cost of a six hundred thousand square foot convention center at each site, including land acquisition, site preparation, construction, business relocation, infrastructure and associated costs.

Said commission, as part of its review, shall study the need, feasibility, costs, financing and benefits of constructing an integral fixed-seating component as part of the new convention center or a separate facility not part of the new convention center, with a capacity of seventy thousand spectators more or less, making dual use of a portion of the space for civil, religious, recreational, entertainment and athletic events, including professional football and major league baseball, which shall include, but not necessarily be limited to:

(*a*) the incremental cost of constructing and operating the fixed-seating component as an integral part of the new convention center;

(*b*) the cost of constructing and operating a separate facility;

(*c*) the incremental effect of the additional fixed-seating component on convention and trade show attendance;

(*d*) identification, projected attendance, economic and fiscal effects, and frequency of events that could be accommodated in the fixed-seating component but could not be accommodated in a facility lacking the fixed seating component;

(*e*) the incremental effects of a fixed-seating component on the economic and fiscal benefits to the commonwealth;

(*f*) the expected incremental operating revenues and expenses of a fixed-seating component, including revenues and expenses that might result from an agreement with the National Football League franchise known as the New England Patriots, or from an agreement with the Major League Baseball franchise known as the Boston Red Sox;

(*g*) the adverse economic impacts on other regions of the state of the construction of a seventy thousand seat, fixed-seating component of the new convention center facility or of any construction of a football stadium or baseball park in connection with the expanded convention center facility; and

(*h*) the feasibility, costs and financing, whether public or private or a combination thereof, of constructing a separate football stadium to be used by the National Football League franchise known as the New England Patriots and a separate baseball park to be used by the Major League Baseball franchise known as the Boston Red Sox.

Said commission, as part of its review, analysis and consideration of each site to the extent the commission reasonably determines such studies or components thereof to be practicable and warranted, shall have conducted a comprehensive environmental study of each site

pursuant to chapter twenty-one E of the General Laws, a comprehensive traffic and parking study relating to each site and other geotechnical or preparatory tests or studies relating to said commission's review pursuant to this section. Said report shall also contain proposed legislation to finance the new convention center, and shall review public and private financing options and alternative methods of financing subject to applicable laws and regulations. The Massachusetts Convention Center Authority shall pay the costs and expenses of tests or studies authorized by item 1599–9955 in section two, which the commission deems necessary and approves.

Said commission shall consult with the Boston Redevelopment Authority and the Massachusetts Convention Center Authority, utilizing the respective and relevant experience and expertise of said authorities, in performing said commission's review, analysis and consideration pursuant to this act.

The Boston Redevelopment Authority and the Massachusetts Convention Center Authority are further authorized and directed to provide to the commission joint recommendations necessary or relevant to the discharge of the commission's duties. If said Boston Redevelopment Authority and said Massachusetts Convention Center Authority fail to agree on such joint recommendations then each entity is further authorized and directed to provide a separate written comment and evaluation of the issues which are in dispute. Said commission shall consider all such recommendations, comments, and evaluations in the discharge of its duties, but shall not be bound by any joint recommendations or separate evaluations.

Said commission shall submit a copy of a final report of its findings resulting from its review, analysis and consideration, including a site recommendation, to the governor, president of the senate, speaker of the house of representatives, chairmen of the house and senate committees on ways and means, the chairmen of the house and senate committees on state administration and the chairmen of the house and senate committees on commerce and labor on or before June first, nineteen hundred and ninety-five, and shall file said report with the clerk of the house of representatives; provided, however, that said commission may submit to the above named persons an interim report or reports before June first, nineteen hundred and ninety-five, if said commission determines such an interim report or reports necessary in performing said commission's review, analysis and consideration pursuant to this act.

Said commission, in consultation with the mayor of the city of Springfield, shall conduct a study of the renovation, construction and expansion of the civic and convention centers in the city of Springfield, including the use of the Steiger's site, so-called, in said city, which might be necessary to increase capacity in the commonwealth for activities such as conventions, trade shows, concerts, theatrical exhibitions and recreational activities, including shows, expositions and professional and amateur athletic events. Said study shall focus on (1) the need for an expanded convention and civic center; (2) the nature and costs of renovations and construction; (3) public and private financing of said renovations and construction; (4) the potential economic impact on the city of Springfield; (5) the impact on traffic, parking and environment in the city of Springfield, and (6) the ownership and management of said facilities. Said commission shall, in consultation with the mayors of the cities of Fitchburg, Marlboro and Lowell, conduct a study of the renovation, construction and expansion of existing or proposed civic and convention centers in said cities, which might be necessary to increase capacity in the commonwealth for activities, such as conventions, trade shows, concerts, theatrical exhibitions and recreational activities, including shows, expositions and professional and amateurs athletic events. A copy of the results of said studies shall be submitted to the governor, president of the senate, speaker of the house of representatives, chairmen of the house and senate committees on ways and means, the chairmen of the house and senate committees on state administration and the chairmen of the house and senate committees on commerce and labor on or before December first, nineteen hundred and ninety-five and said commission shall file the results of said study with the clerk of the house of representatives.

Said commission is further directed to review and evaluate the costs and benefits associated with the expansion, modernization, or creation of additional convention facilities in other regions of the commonwealth. Said study shall include consideration of a convention center in the city of Haverhill. Said study shall include consideration of establishing a southeastern Massachusetts conference and convention center at the University of Massachusetts at

Dartmouth and, for said purpose, the commission shall consult with the Southeastern Regional Planning and Economic Development District, the Bristol County Convention and Visitors Bureau and regional chambers of commerce. Said study shall include consideration of establishing a southeastern Massachusetts conference and convention center in the southeastern Massachusetts region, and for said purpose, the commission shall consult with the appropriate regional planning and economic development districts, county convention and visitors bureaus, and regional chambers of commerce. Said study shall include consideration of establishing a Cape Cod convention center in the mid-Cape area, and for said purpose the commission shall consult with the Cape Cod Economic Development Council. Said study shall include consideration of establishing a Fort Devens regional convention center in central Massachusetts and, for said purpose, the commission shall consult with the Devens enterprise commission. A copy of the results of said studies shall be submitted to the governor, president of the senate, speaker of the house of representatives, chairmen of the house and senate committees on ways and means, the chairmen of the house and senate committees on state administration and the chairmen of the house and senate committees on commerce and labor on or before July first, nineteen hundred and ninety-six and said commission shall file the results of said study with the clerk of the house of representatives.

Any department, division, commission, public body, authority, board, bureau or agency of the commonwealth or the city of Boston is hereby authorized, empowered and directed to cooperate with the commission for the purpose of providing information deemed relevant to the construction, operation and maintenance of vehicular, mass transportation, convention center and pedestrian access facilities for the new convention center in said city of Boston and for the renovation and construction of the civic and convention center in the city of Springfield and in other regions of the commonwealth.

The commission shall be dissolved as of September first, nineteen hundred and ninety-six.

SECTION 4. The executive office of transportation and construction and the department of highways are hereby authorized and directed to prepare a plan detailing all the options, with associated costs and benefits of each, for a project to alleviate traffic congestion on Route 1 north and south to improve public access to Foxborough stadium in the town of Foxborough. Said plan shall consider the option of widening Route 1 north and south from the entrances and exits at Foxborough stadium north to interstate Route 95 and south to interstate Route 495. Said executive office and said department shall file said plan with the house and senate committees on ways and means not later than June first, nineteen hundred and ninety-five.

SECTION 5. This act shall take effect upon its passage.

Approved February 10, 1995.

EDUCATION DEPARTMENT—SICK LEAVE BANK

CHAPTER 7

H.B. No. 288

AN ACT establishing a sick leave bank for Antonette Tocchio, an employee of the department of education.

Whereas, The deferred operation of this act would tend to defeat its purpose, which is to immediately establish a sick leave bank for a certain employee of the department of education, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

2. SUMMER STREET PARCEL

The Summer Street Parcel is an approximately 137-acre parcel located in South Boston in the area east of Fort Point Channel and west of the Reserve Channel. It is an expanded version of the original Summer Street Parcel and is now bounded by Summer Street to the north, Reserve Channel to the east, Cypher Street to the south, and Fort Point Channel to the west.

General types of site uses on and immediately adjacent to the project parcel include wholesale food/seafood distribution warehouses, trucking terminals, truck and heavy equipment maintenance, general warehousing and, until recently, an extensive freight yard. A portion of the perimeter of the site is dominated by Central Artery Tunnel construction activities, including Third Harbor Tunnel construction along Summer Street and the Haul Road in the northeast portion of the parcel.

2.1 Summer Street Parcel Description

The topography in the South Boston area is dominated by a glacial drumlin called Telegraph Hill, which rises approximately 130 feet above Mean Sea Level (MSL) to the southeast of the Summer Street Parcel. The Summer Street Parcel itself is located in a flat, low-lying area approximately 10 to 20 feet above MSL, composed entirely of fill emplaced as early as the late 1800s. Fill material came from a variety of sources, one of which is speculated to be debris and rubble from the Great Fire of 1872. Records indicate that a considerable volume of cinder and ash was also dumped in this area in the late 19th century. The earliest use of the area was for railroad facilities, automobile repair shops, machine shops, and limited manufacturing. With time, land use expanded to include blacksmiths, paint shops, fuel storage, and increased rail traffic, which included transport of chemicals and petroleum. Thus, there is considerable potential for the subsurface materials to have significant concentrations of heavy organic compounds (semivolatile organic compounds, or SVOCs), petroleum, and metals. While much of the Summer Street Parcel is now paved, some rail use persists and seafood processing facilities have also moved in.

Central Artery/Tunnel investigations along the west and north sides of the original Crossroads Parcel, and along the east and west sides of the nearby South Bay area, indicate that artificially-emplaced fill is ubiquitous at the surface and to depths up to 20 feet. Much of this material includes fine-grained dredge spoils taken from the Fort Point Channel, Reserve Channel, and other areas of the Harbor. Records indicate that a system of stone and wooden bulkheads were constructed to contain the fill as it was emplaced, and these bulkheads may be encountered during future excavation and construction activities.

Beneath this fill layer is a layer of organic sediments consisting of silts and fine sands interbedded with peat. In the Summer Street area, this horizon is generally underlain by less than 10 feet of coarser granular glacial soil. Beneath the organic and granular soils is a 25 to 70-foot thick layer of marine clay (Boston Blue Clay), the upper portions of which are generally stiff to very stiff yellow silty clay, grading downward to soft to medium stiff blue clay. This clay may reasonably be assumed to represent a low permeability barrier impeding downward migration of contaminants.

The clay horizon is underlain by 10 to 25 feet of glacial till, which is in turn underlain by bedrock consisting of argillite (a fine-grained, often brittle marine sedimentary rock). The uppermost 15 feet of bedrock is often heavily weathered, forming a densely compacted till-like material that can have low permeabilities. The underlying fresh bedrock will tend to be fractured and capable of holding and transmitting groundwater.

Depths to groundwater vary in the vicinity of the Summer Street Parcel, but generally range in the interval of 5 to 15 feet below grade. Directions of groundwater flow are not well known, but can be assumed to migrate toward some portion of the harbor shoreline. It is likely that groundwater beneath the Summer Street Parcel flows radially to the northwest, northeast, and southeast, with the harbor equidistant in those directions. Within the site, flow may vary widely in response to variations in the fill, preferential flow along utility corridors and bedrock fractures, and recharge by/ discharge to water and sewer mains. Consequently, it is difficult to predict the direction(s) of migration of groundwater contamination without substantial subsurface investigation.

2.2 Summer Street Chapter 91 Waterways Jurisdiction/Wetlands Resource Areas

2.2.1 Chapter 91 Tidelands Jurisdiction

At DCPO's request, EARTH TECH reviewed information concerning the type and extent of tidelands found at the Summer Street Parcel, and the extent to which the proposed Megaplex facilities would be subject to Chapter 91 jurisdiction. The following sources of information were used to compile historical and cartographic evidence in determining the approximate locations of the Historic High Water Mark (HHWM) and Historic Low Water Mark (HLWM) in the vicinity of the Summer Street Parcel.

- Massachusetts Department of Environmental Protection (DEP) - Chapter 91 Waterways Regulation Program
- Peabody Museum Archives, Salem, Massachusetts
- State House Library - Special Collections

- Boston Water and Sewer Commission

The methodology used to determine the extent of Chapter 91 tidelands jurisdiction involves examination of historic maps and charts that can provide evidence of former shoreline configurations and upland/tideland boundaries. Using standard coastal engineering/survey techniques to match the scales of various cartographic and hydrographic resources, the HHWM and the HLWM can be determined as they relate to the existing conditions of a project site. From this mapping analysis, the extent and type of Chapter 91 tidelands jurisdiction within an area can be determined.

2.2.1.1 Mapping History of the Summer Street Parcel

A series of historical maps and charts drawn to various scales and detail were examined and compared to the existing shoreline conditions in the vicinity of the Summer Street Parcel to determine to the extent possible the locations of the earliest documented HHWM and HLWM of Boston Harbor. The time series of maps and charts depicting this area ranges from 1817 to 1910. The maps and charts utilized include:

1. Chart of Boston Harbour - Alex S. Wadsworth, 1817
2. Topographic and Hydrographic Survey of Boston Harbor - Survey of the Coast of the United States, 1867
3. Topographic and Hydrographic Survey of Boston Harbor - Coast and Geodetic Survey, 1910
4. Earliest Known Shoreline of Boston Harbor - Massachusetts DPW Plan

Written descriptions of these maps and charts are presented below:

1. The 1817 Chart of Boston Harbour shows the Summer Street Parcel area prior to significant development. During this time period, this land area was located entirely on tidal flats during extreme low water conditions. The HHWM appears to be located in the vicinity of First Street and is indicated by a heavy solid black line. This heavy solid line indicating the seaward edge of the upland generally coincides with the HHWM shown on the DPW map entitled "Earliest Known Shoreline of Boston Harbor" discussed below. An intertidal area is noted by dark stipples. The historic mean low water mark (HLWM) is shown by the first solid black line seaward of the HHWM. Beyond the HLWM lighter shaded stippling shows banks and shoals. The extreme low water mark is shown by another solid black line (the most seaward black line). See Figure 2-1.

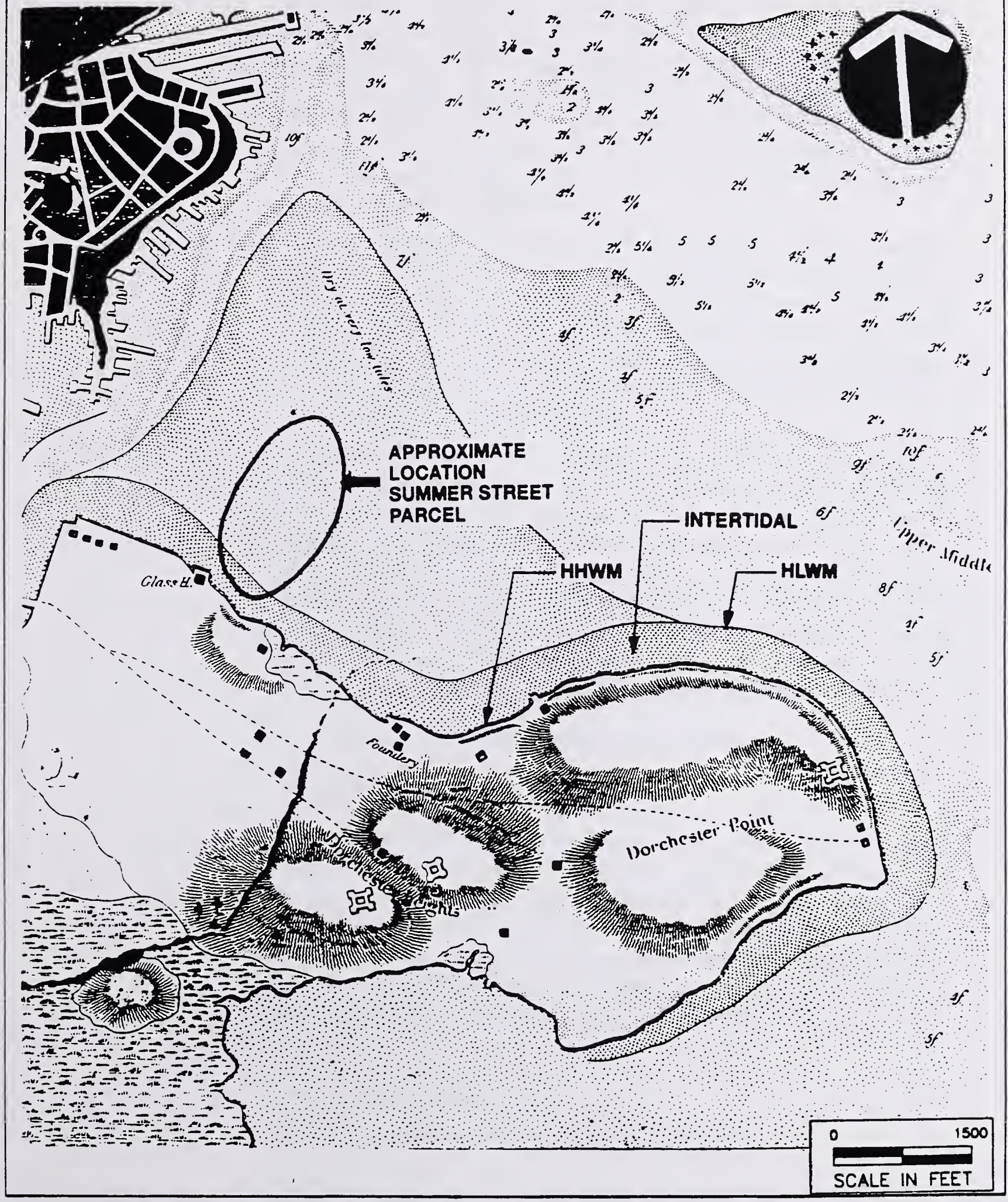


Figure 2-1
1817 Chart of Boston Harbor - A.S. Wadsworth
Summer Street Parcel

2. The U.S. Coastal Surveys are generally considered to be the most accurate maps of the mid-1800's. The 1867 Topographic and Hydrographic Survey of Boston Harbor, indicates that a portion of the intertidal zone and tidal flat in the vicinity of the Summer Street Parcel has been incrementally filled and developed since the early 1800's. However, much of the Summer Street Parcel during this time period is still located on undeveloped intertidal land. Due to the development that occurred after 1817, the high water mark is shown to have moved seaward. See Figure 2-2.

3. The 1910 Topographic and Hydrographic Survey of Boston Harbor indicates additional development in the vicinity of the Summer Street Parcel and beyond. The majority of the Summer Street Parcel has been filled and developed by this time, and the land seaward of this area has also been filled and wharved out into Boston Harbor to obtain deep water access for shipping. The only portion of the site still located within flowed tidelands at this time is within the Reserve Channel. See Figure 2-3.

4. The undated DPW map showing the earliest known shoreline of Boston Harbor is a compilation of information from four maps including the 1817 Wadsworth survey described in item #1. The three other plans incorporated in this map are those by Henry Pelham - 1775, John G. Gale - 1813 and U.S. Coast Survey - 1847. On this map the heavy line is noted as representing the "earliest known shoreline of Boston Harbor" and is generally accepted by DEP as the landward limit of Chapter 91 jurisdiction in Boston Harbor. This map also includes upland configuration information (streets, playgrounds, bridges, etc.) which facilitates locating this historic shoreline on modern site plans. See Figure 2-4.

2.2.2.2 Findings on Chapter 91 Tidelands Jurisdiction

Location of Historic Water Marks

Based on the research and analysis of the historic maps and charts described above, it has been determined that the Summer Street Parcel is located seaward of the HHWM, and both seaward and landward of the HLWM, i.e., the Summer Street Parcel is filled former tidelands. This determination was made by taking the historic maps and charts with the best scales and matching the scales and common points of reference on a map showing the existing shoreline conditions in the area. The following historic plans were the most useful in determining the locations of the historic shorelines:

1. The 1817 Plan of Boston Harbour
2. The DPW's Earliest Known Shoreline in Boston Harbor

See Figure 2-5 for the approximate locations of the HHWM and the HLWM as determined by these plans.

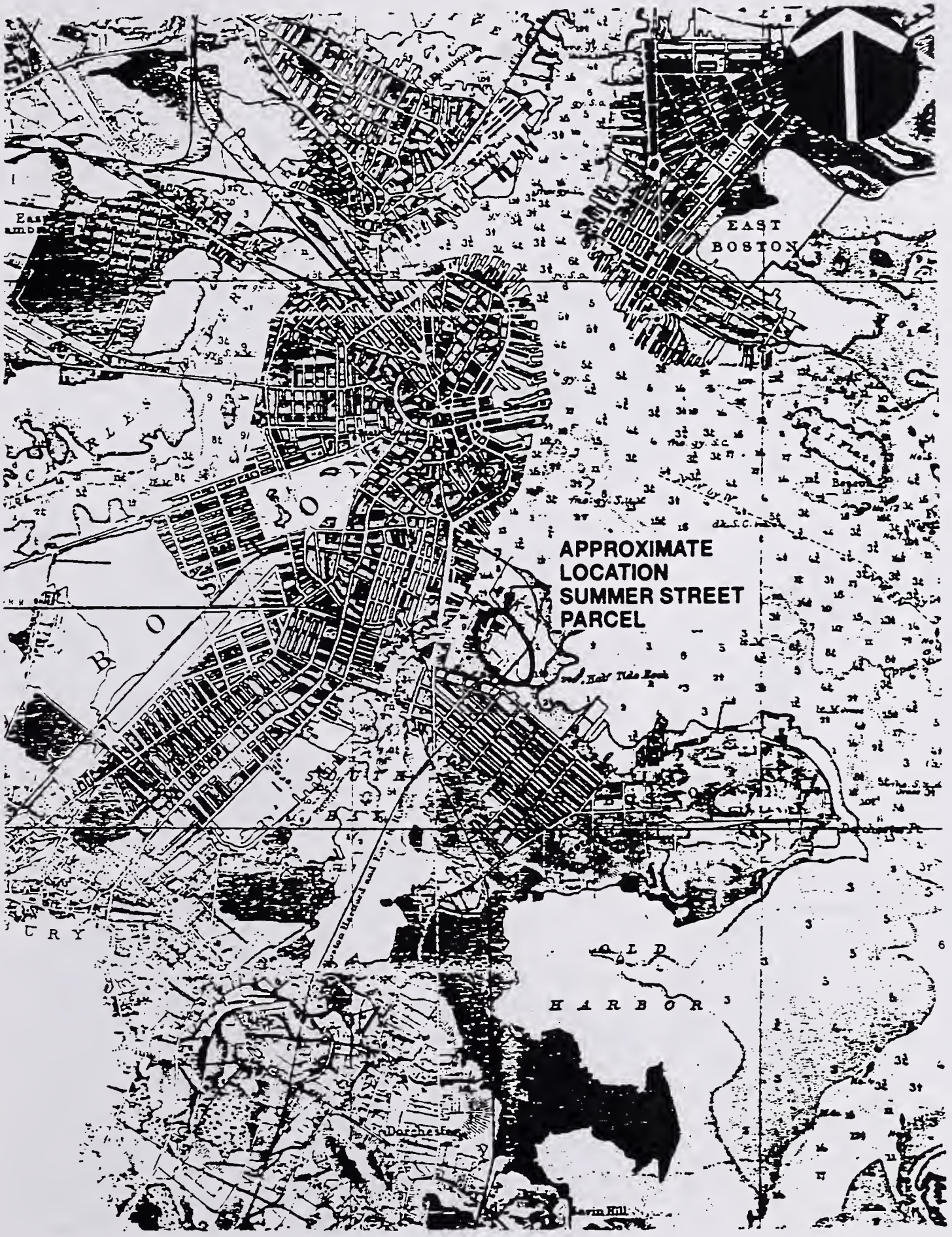


Figure 2-2
1867 Topographic and Hydrographic Survey of Boston Harbor
Summer Street Parcel

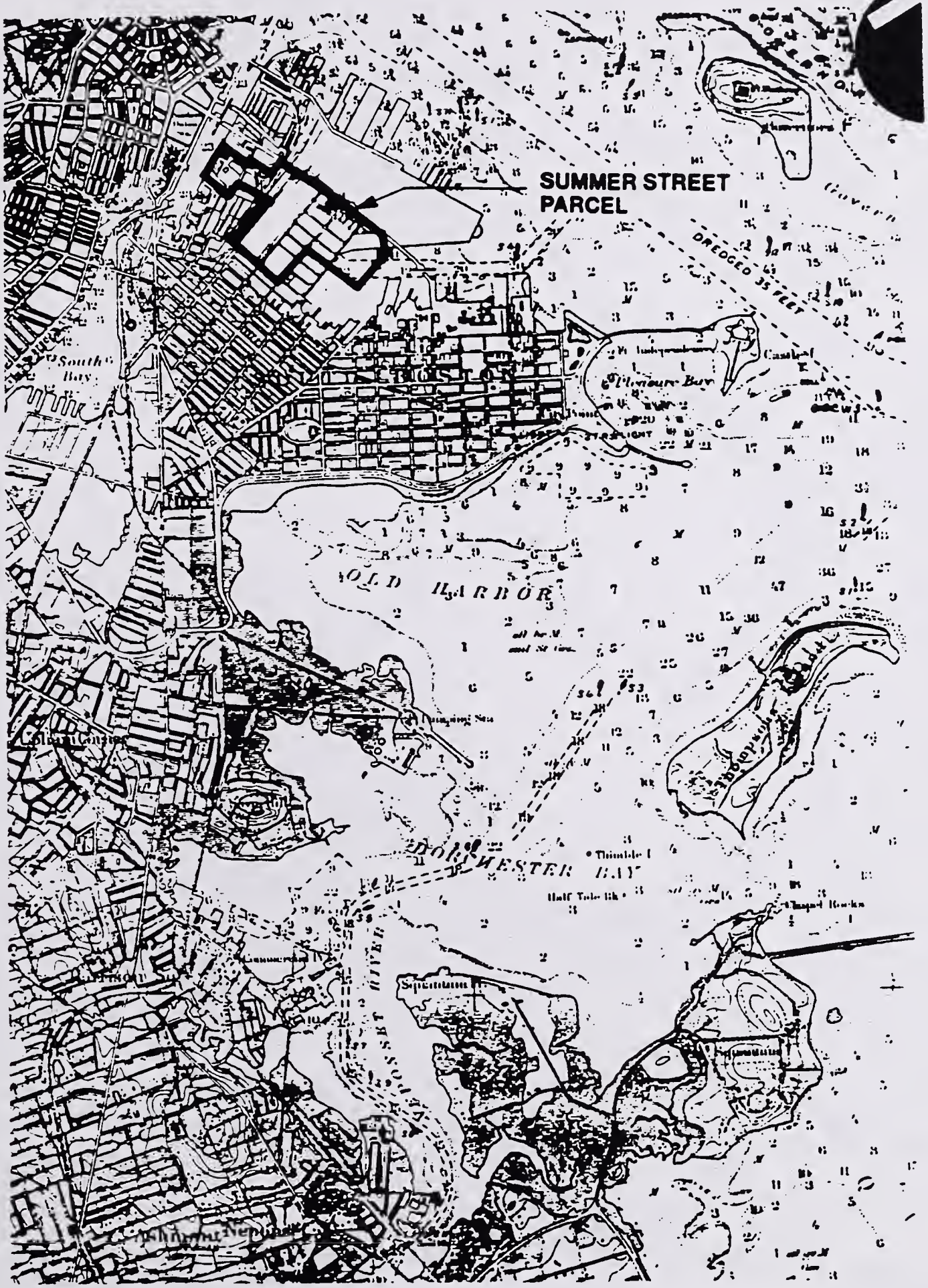


Figure 2-3
1910 Topographic and Hydrographic Survey of Boston Harbor
Summer Street Parcel

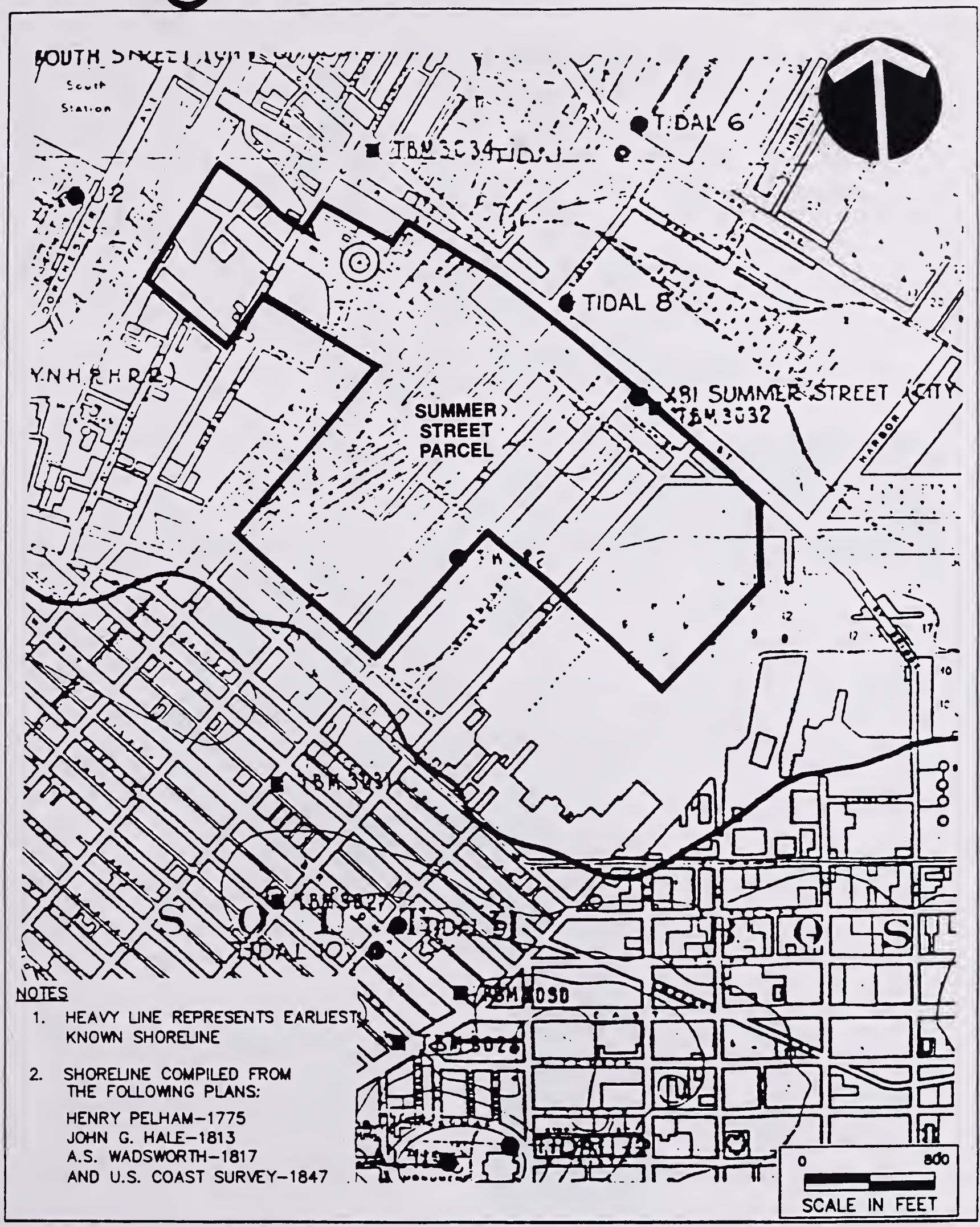


Figure 2-4
Earliest Known Shoreline of Boston Harbor - DPW Plan
Summer Street Parcel

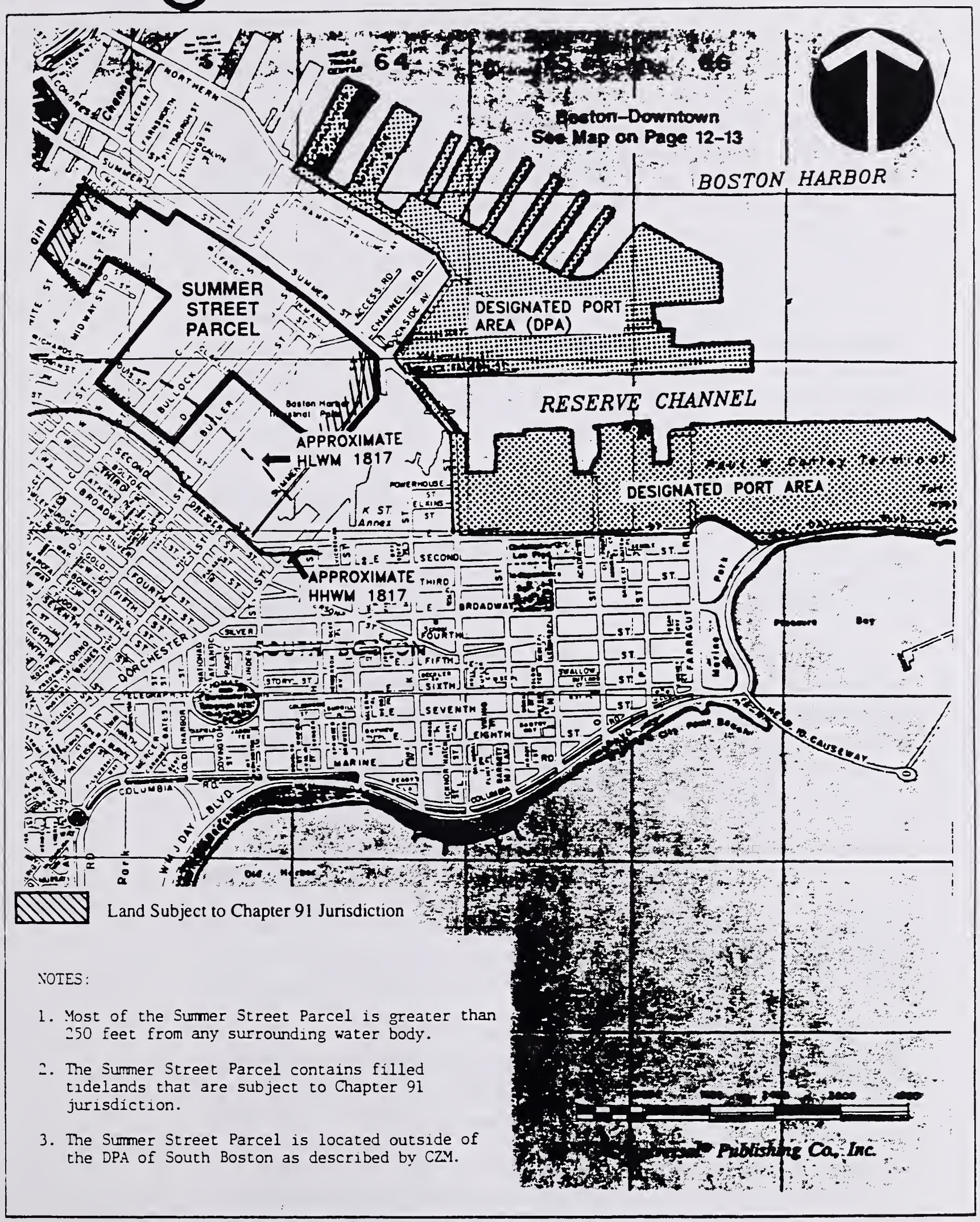

Boston–Downtown
See Map on Page 12-13
BOSTON HARBOR
SUMMER STREET PARCEL
DESIGNATED PORT AREA (DPA)
RESERVE CHANNEL
APPROXIMATE HLWM 1817
APPROXIMATE HHWM 1817
DESIGNATED PORT AREA
Land Subject to Chapter 91 Jurisdiction
NOTES:
1. Most of the Summer Street Parcel is greater than 250 feet from any surrounding water body.
2. The Summer Street Parcel contains filled tidelands that are subject to Chapter 91 jurisdiction.
3. The Summer Street Parcel is located outside of the DPA of South Boston as described by CZM.
Publishing Co., Inc.

Figure 2-5
Approximate Location of the Historic Shorelines
Summer Street Parcel

Type and Extent of Tidelands

The results of the historical mapping analysis indicates that the Summer Street Parcel is located entirely within filled tidelands of Boston Harbor. Filled tidelands are defined in the DEP Waterways Regulations as those formerly submerged lands and tidal flats which are no longer subject to tidal action due to the presence of fill. The filled tidelands on the Summer Street Parcel consist of both filled Private Tidelands and filled Commonwealth Tidelands. The Chapter 91 Waterways Regulations define Private Tidelands as those tidelands which lie between the mean high water mark and the mean low water mark. The title to these lands may be held by a private person. The Chapter 91 Waterways Regulations define Commonwealth Tidelands as lying seaward of the mean low water mark. Title to these lands is held by the Commonwealth of Massachusetts or by a private person by license or grant subject to express or implied condition subsequent that it be used for a public purpose.

Landlocked Tidelands

The landward limit of Chapter 91 tidelands jurisdiction at the Summer Street Parcel is governed by the limits of Landlocked Tidelands as defined by the Chapter 91 Waterways regulations at 310 CMR 9.02. Landlocked Tidelands are defined as,

> "any filled tidelands which on January 1, 1984 were entirely separated by a public way or interconnected public ways from any flowed tidelands, except for the portion of such filled tidelands which are presently located: (a) within 250 feet of the high water mark, or (b) within any Designated Port Area. Said public way or ways shall also be defined as landlocked tidelands, except for any portion thereof which is presently within 250 feet of the high water mark."

The majority of the Summer Street Parcel is located on Landlocked Tidelands as defined by the DEP Chapter 91 Waterways Regulations.

The Summer Street Parcel boundary along Summer Street is a distance greater than 250 feet from Boston Harbor, and is separated from this waterbody by several public roadways including Summer Street.

The Summer Street Parcel boundary along Fort Point Channel is subject to Landlocked Tidelands jurisdiction landward of Necco Street. Necco Street appears to be the first public way separating the site from the Channel, and is a distance greater than 250 feet from the Channel.

The summer Street parcel boundary along the Reserve Channel is subject to Landlocked Tidelands jurisdiction landward of Summer Street 250 feet from the mean high water line of the Channel, whichever is the greater distance from the Channel.

The entire Summer Street Parcel is also located outside of the DPA as indicated on Figure 2-5. Under the Chapter 91 Waterways Regulations, DEP has excepted from its jurisdictional authority certain Landlocked Tidelands including those located on the Summer Street Parcel.

2.2.2.3 Conclusions Concerning Chapter 91 Tidelands Jurisdiction

In summary, the analysis of available historical maps and information on the development of the Summer Street Parcel indicates that the majority of the parcel is located within Landlocked Tidelands, and not subject to Chapter 91 jurisdiction.

The only portions of the Summer Street Parcel subject to Chapter 91 jurisdiction are:

- The parcel's boundary along the Fort Point Channel from the present mean high water mark (along the Channel's bulkheaded bank) to Necco Street.
- The parcel's boundary along the Reserve Channel from the present mean high water mark (along the Channel's bulkheaded bank) to Summer Street or 250 feet from the present mean high water mark, whichever is a greater distance from mean high water. The two areas within the Summer Street Parcel subject to Chapter 91 jurisdiction contain filled Commonwealth Tidelands. Any construction or change in use within these areas will require Chapter 91 Waterways Licensing.

2.2.2.4 Wetland Resource Areas

Due to the developed nature of the Summer Street Parcel, it is unlikely that any inland wetland resource areas exist on the site or within 100 feet of the parcel. It should be noted that a formal ecological inspection of the site was not conducted.

Any construction activities within 100 feet of the existing coastal wetland resource areas including land under the ocean and coastal bank of the Reserve Channel and the Fort Point Channel will be subject to the Massachusetts Wetlands Protection Act.

2.3 Perimeter Survey

EARTH TECH performed a limited visual survey of the perimeter of the Summer Street Parcel on April 25 and 26, and May 2, 1995. The survey was performed by walking and driving the boundary streets, streets that transect the parcel, and other public thoroughfares. EARTH TECH did not have legal access to private properties. Observations made during the perimeter survey included noting the presence of fuel dispensing pumps, and associated above-ground evidence of USTs, signs of storage and/or dumping of solid waste, apparent land uses, and other indicators which could yield information on other potential areas of concern. Photographs of the general area and specific locations/items were also taken during the perimeter survey. Photographs are presented in Appendix A.

The streets contained within the site boundaries, and included in EARTH TECH's reconnaissance were:

- A Street;
- Haul Road (or B Street);
- C Street;
- D Street;
- Cypher Street;
- Louis Street;
- Claflin Street;
- Bullock Street;
- Fargo Street;
- Summer Street;
- Mt. Washington Street;
- Binford Street;
- Wormwood Street;
- Necco Street; and
- Necco Court.

Other peripheral streets were included in EARTH TECH's survey to provide additional site usage information on properties in the immediate vicinity of the Summer Street Parcel. In order to provide a logical discussion of site-specific land use, we have subdivided the parcel by street boundaries.

The area bounded by C Street, Fargo Street, Haul Road, and Louis Street consists primarily of remnants of an old freight yard which was associated with the Boston Freight Terminal located at 31 Fargo Street (see Photographs 3 and 4 in Appendix A). The area now appears to be occupied with Central Artery construction support services and tractor trailer transportation support for the Terminal, railroad tracks, tanker cars, and construction support equipment. A portion of this area contains the former Boston Iron and Metal Company, or Boston Junk property (see Photograph 5 in Appendix A). This site is listed by the DEP as a Priority Confirmed site where petroleum and hazardous materials, primarily PCBs, have been released to the environment. Visual observations indicated the presence of numerous piles of solid waste debris. Located at the southern end of the 31 Fargo Street building is the Boston Heliport facility. Several helicopters were observed at the site by EARTH TECH. Although not visually documented, EARTH TECH surmises that USTs are present on the site for the purposes of fueling helicopters. It is also thought that

repair facilities are present at the site that might use various petroleum products typically involved in engine and equipment repair. Also contained within the portion of the site are a seafood distribution warehouse, a printing service, and box supply company.

The area bounded by Louis Street, C Street, Cypher Street, and Haul Road contains warehouses, a portion of the above-mentioned Boston Iron and Metal Co., and ancillary support for the Central Artery construction project. This portion of Cypher Street is closed and appeared to contain several piles of solid waste debris.

The area bounded by Claflin, Bullock, Cypher, and C Streets contains a gas station (Four T's Truck Stop with at least six (6) USTs as indicated by the fuel pumps; see Photograph 2 in Appendix A), Thermo King offices and truck repair facility, and various warehouse facilities.

The area bounded by Claflin, D, Cypher, and Bullock Streets contains the Massachusetts DPW Fuel Depot and a Mass Highway Research and Materials Office. At least two gas pumps (suggesting the presence of at least two associated USTs), were observed at the rear of the main building, and it is inferred that significant quantities of petroleum products may be used/stored. Additionally, the southern portion of this area is also occupied by ancillary Third Harbor Tunnel construction activities.

The block bounded by D, Claflin, Bullock, and Fargo Streets contains one large warehouse of unknown use. The northern portion of the block is vacant and is the location of the Boston Water and Sewer Commission DEP-listed site (listed on DEP's Locations to be Investigated (LTBI), for releases of oil and/or hazardous materials) and the inferred Grant Rental site. Solid waste dumping was observed along Bullock Street near Claflin Street (see Photograph 6 in Appendix A).

The next block north is bounded by Bullock, Claflin, C, and Fargo Streets. This block contains a flower warehouse at 51 Fargo Street, a tractor trailer parking area, a Massachusetts Inspection Station, and several other warehouses along C Street.

The block bounded by Summer, D, Fargo, and C Streets is occupied by one large warehouse, which appears to be vacant except for the Boston Water and Sewer Commission offices. The remaining parcel, which is enclosed by Summer, C, Fargo, and Haul Road, also contains several warehouses. Some type of manufacturing was observed at either 24 or 38 Fargo Street (street numbering was unclear).

The block bounded by Summer Street, an unnamed street, and Melcher Street to the north, Haul Road to the east, Wormwood and Mt. Washington Streets to the south, and the Fort Point Channel to the west consists of parking lots, warehouses (mostly abandoned), and Central Artery construction activities.

The block bounded by Summer Street to the north and east, an imaginary extension of Claflin Street to the south, and E Street to the west contains the U.S Army Reserve Center, warehouses, parking lots, an automotive transfer facility, the Boston Athletic Club, and several other office buildings.

Several locations within the parcel were observed to have fuel dispensing equipment and therefore were inferred to have underground storage tanks (USTs; see Photo 1 in Appendix A). USTs were also inferred to be present at the Boston Heliport location for the purposes of fueling aircraft. These locations are listed in Table 2-1.

Table 2-1: Observed/Inferred Locations of USTs (exclusive of registered USTs) - Summer Street Parcel

Site Name	Site Address	Map ID# (Figure 2-7)	Distance/Direction
Boston Heliport	C St.	1	Property
C. Walsh Movers	D St.	2	0.1 miles south
US Postal Service South Annex	135 A St.	3	0.1 miles west

As the Summer Street Parcel is located in a filled industrialized area, it is anticipated that urban fill and its associated industrial contamination (i.e. total petroleum hydrocarbons, polycyclic aromatic hydrocarbons, and heavy metals) are likely present in soils. Also given the general site usage and apparent number of USTs, a potential exists for petroleum-contaminated groundwater. Additionally, a portion of the parcel was a freight yard from prior to 1923 to the present time. This type of site use has the potential for spills of petroleum and chemicals, for metal-rich ash used as fill, and SVOCs from treated rail ties.

2.4 On-Line Data Search

An on-line search for data concerning releases of oil and hazardous materials was performed by EARTH TECH to compile site-specific information from a number of federal, state, and local sources to supplement DEP file review and site reconnaissance efforts. The search was performed through New England DataMap Technology and generated search summary reports (see Appendix B). The sources searched by the on-line service included:

- National Priority List (NPL) - This is the United States Environmental Protection Agency's (EPA's) list of Superfund sites;
- Comprehensive Environmental Response Compensation and Liability Act Information System (CERCLIS) - This is EPA's list of sites identified in Site Discovery or undergoing Preliminary Assessments (PAs) or Site Inspections (SIs);

- Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities (TSDFs) and Generators (large and small) of hazardous waste - This is EPA's list of registered hazardous waste handlers;
- Emergency Response Notification System (ERNS) - This is EPA's spills database;
- National Pollution Discharge Elimination System (NPDES)- This is a database of facilities holding EPA permits to discharge water containing or potentially containing OHM;
- State sites (DEP);
- State spills (DEP);
- Solid Waste Landfills (DEP);
- State permitted facilities (DEP);
- Partial list of registered underground storage tanks (USTs);
- Public Water Supplies (DEP); and
- Areas of Critical Environmental Concern (ACEC)- areas designated by EOEA as environmentally sensitive.

No federal Superfund/NPL sites are listed within approximately 0.5 miles of the Summer Street Parcel, nor were any RCRA TSDFs found. Table 2-2 summarizes the seven (7) CERCLIS sites identified within 0.5 miles of the parcel, and Table 2-3 identifies the known RCRA (hazardous waste) Generators contained within the parcel. Numerous ERNS reports and spills are documented within, and in the immediate vicinity of the parcel. An intensive review of the details of the on-line data reports has not been performed for this assessment because as "spills" they are not typically of a magnitude that would have a significant impact on parcel development.

Registered USTs identified on the on-line database proximal to the Summer Street Parcel are shown in Table 2-4. Boston Fire Department UST files were not available as of the date of this report.

Table 2-2: CERCLIS Listings - Summer Street Parcel

Site Name	Site Address	Site Status	Fig. 2-7 ID#	Distance/Direction
Defense Support Activity (U.S. Army Reserve Center)	495 Summer St.	Not proposed	1	0.1 miles east/northeast
Boston Junk	14 Louis St.	NFA	2	Parcel
U.S. Postal Service (South Postal Annex)	135 A St.	NFA	3	0.1 miles west
Boston Edison	766 Summer Street	Not proposed	off map	0.2 miles southeast
King Terminal	East First Street	NFA	4	0.2 miles southeast
Laidlaw Waste Systems	530 E. First Street	NFA	5	0.2 miles southeast
South Boston Naval Annex	Dry Dock Ave.	Not proposed	6	0.2 miles east

Not proposed = site is still being evaluated as a candidate for Final Listing
NFA = designates no further action by the EPA

Table 2-3: RCRA Generators - Summer Street Parcel

Facility ID	Facility Name	Facility Address	Activity Type
MAD043414788	Boston Thermo King Sales	5 Claflin St.	VG
MAD980734297	Comm of Mass DPW	400 D St.	VG
MA5000002105	BSC Group	425 Summer St	SG
MAD048272900	Grant Rental	442 D St.	SG
MAD053446498	Bowne of Boston	411 D St.	SG
MAD001034149	U.S. Postal Service	647 Summer Street	SG
MA0180001018	Regal Lithograph Co.	259 A St.	VG

Notes: VG = Very Small Quantity Generator (0-99 kg/month)
SG = Small Quantity Generator (100-1000 kg/month)

Table 2-4: Registered USTs - Summer Street Parcel

Site Name	Site Address	Fig. 2-7 ID#	Distance/Direction
Four T's Truck Stop	24 Cypher St.	1	Parcel
Package Chemical Co.	218 West First St.	2	0.1 miles southwest
Ryder Truck Rental	280 West First St.	3	0.1 miles south
Shaughnessy Cos.	295 West First St./346 D St.	4	0.1 miles south
Trafalgar Square Realty	393 D St.	5	0.1 miles south
Mass Highway Dept.	400 D St.	6	Parcel
Boston Marine Industrial	10 Dry Dock Ave.	7	0.2 miles east

Notes: Parcel = sites on the parcel.

Observations made during EARTH TECH's perimeter survey of the parcel suggest that there may be numerous unregistered USTs within the parcel and immediate

surrounding area, since no records were found for tanks at several locations where fuel dispensing was observed.

EARTH TECH also generated a Massachusetts Geographic Information System (GIS) map for the Summer Street area (see Figure 2-6). The source data for the GIS mapping is supplied by the Massachusetts Executive Office of Environmental Affairs. A listing of the types of data included is shown in the legend of Figure 2-6. The source data was last revised in June, 1994, and shows no oil/hazardous material-release locations on the Summer Street Parcel that are noted on the GIS database.

2.5 Department of Environmental Protection File Data

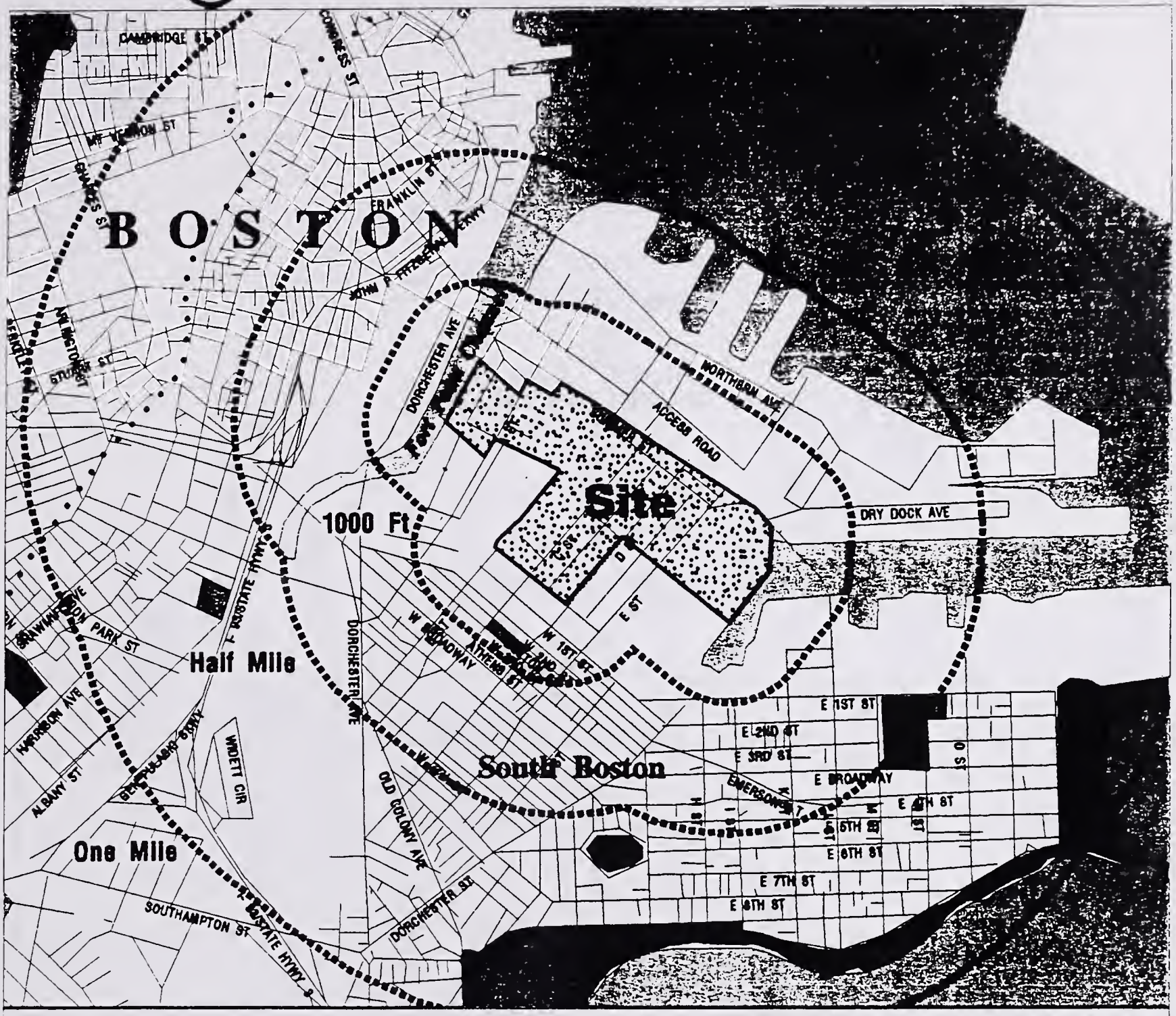
As part of this preliminary environmental assessment, records and files maintained at the Department of Environmental Protection (DEP) Regional Offices in Woburn, Massachusetts were reviewed by EARTH TECH on April 25 and 26 and May 3, 1995.

The DEP "Transition List of Confirmed Disposal Sites and Locations to be Investigated" (LTBI) dated July 1993 and Addendum list dated March 1994 identified sixteen (16) sites within one quarter mile of the subject site. Each site and its current status are listed below in Table 2-5. These lists identify the confirmed and suspected oil and hazardous material release sites known to the DEP and regulated under the MCP. The lists do not identify sites which are considered adequately regulated under other programs such as the Resource Conservation and Recovery Act (RCRA) or which were identified after October 1, 1993. Confirmed or suspected oil and hazardous material release sites identified after October 1, 1993 are not listed on currently available databases or indices.

A brief discussion of each site is presented below. Additionally, each site is referenced by a specific number and can be found geographically depicted on Figure 2-7.

DEP Site # 3-4754, Boston Water and Sewer Commission (Site 1)

This site encompasses one city block, bounded by Bullock, Claflin, D and Fargo Streets, and is located in the northeast portion of the Summer Street Parcel. An environmental site assessment in 1986 discovered the presence of petroleum-contaminated soil and groundwater. The highest concentration of benzene, toluene, ethylbenzene, and xylene (BTEX) in groundwater was 334 parts per billion (ppb). A subsequent assessment in 1992 included the installation of sixteen groundwater monitoring wells. Soil samples collected and analyzed revealed elevated concentrations of volatile organic compounds (VOCs) (BTEX, 1,590 parts per



Ground Water
Surface Water
Distribution Reservoir
Closed Well
Proposed Well
Historic Well
Historic Surface Water

Federal Open Space
State Owned Open Space
County Owned Open Space
Town-Owned Public Open Space
Non-Profit Owned
Privately Owned Open Space
Ownership Unknown

Area of Critical Environmental Concern
NHESP Priority Habitats for State-Listed Rare Species 1993: NOT for use with Wetlands Protection Act or Mass. Endangered Species Act.
NHESP Estimated Habitats for Rare Wetlands Wildlife 1993: For use with Wetlands Protection Act ONLY.
DEP Approved Zone II Protection Area
Interim Zone II Protection Area

DEP Permitted Solid Waste Facility
Stream or River
Drainage Basin Divide

Source data supplied by the Massachusetts Executive Office of Environmental Affairs, MassGIS. Map compiled by Earth Tech, April 1995 from data supplied by MassGIS. Source data last revised June 1994.

1:24,000
0 2000 4000
Feet

FIGURE 2-6

GIS MAP, SUMMER STREET PARCEL

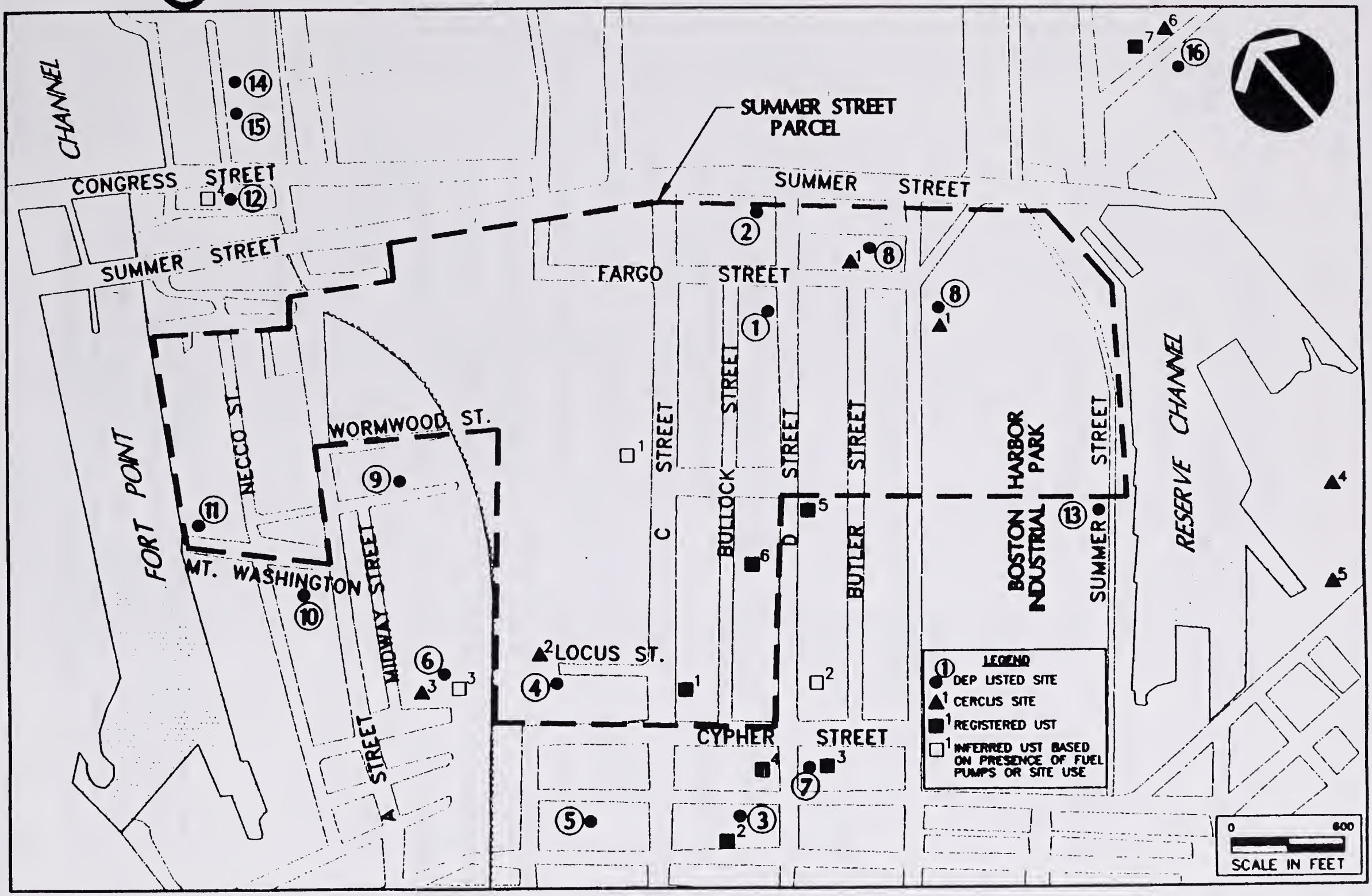


Figure 2-7
Locations of OHM/UST Sites
Summer Street Parcel

Table 2-5: DEP Listing - Summer Street Parcel

Site No./ Map No.	Site Name	Site Address	Listed	Distance/Direction
3-4754 (1)	Boston Water and Sewer Commission	Fargo St. & D St.	Waiver	Parcel
3-2447 (8)	U.S. Army Reserve Center	495 E St.	LTBI	0.1 miles east/ northeast
3-2401 (7)	Ryder Truck Rental	280 West First St.	Waiver	0.1 miles south
3-1918 (6)	South Postal Annex	135 A St.	Unclassified Confirmed	0.1 miles west
3-1049 (3)	Bonney's Express	320 D St.	LTBI	0.1 miles southwest
3-0580 (4)	(former) Boston Junk	14 Louis St.	Priority Confirmed	Parcel
3-0248 (2)	(former) Mobil Station	425 Summer St.	Confirmed	Parcel
3-0247 (5)	North Shore Recyclers	B/West First/Cypher Sts.	Unclassified Confirmed	0.1 miles west/ southwest
3-0198 (1)	Grant Rental (Gasoline Station)	442 D St.	LTBI	Parcel
3-1284 (No #)	Advanced Viaduct/Canal	@ 3rd Harbor Tunnel Project	Non-priority Confirmed	Unknown
3-1286 (9)	Industrial Property	11 - 52 Binford St.	LTBI	0.05 miles west
3-2966 (10)	Gillette Co.	35 Mt. Washington St.	Waiver	0.05 miles northwest
3-4365 (11)	Gillette Co.	1 Gillette Park	LTBI	Parcel
3-3826 (12)	New England Telephone	343 Congress St.	LTBI	0.1 miles north
3-4507 (13)	New England Telephone	649 Summer St.	LTBI	0.1 miles south
3-4363 (14)	Boston Wharf Co.	44 Farnsworth St.	LTBI	0.25 miles northeast
3-0636 (15)	Farnsworth Fiber Co. (FMR)	24 Farnsworth St.	Waiver	0.2 miles northeast
3-2809 (16)	Harbor Gateway Industrial Park	1 - 9 Drydock Ave.	Waiver	0.1 miles east

Notes: LTBI = Location to be Investigated
Parcel = sites on the parcel

million (ppm)), semi-volatile organic compounds (SVOCs)(551 ppm), and "coal tar" (4.3 ppm). Petroleum hydrocarbons (TPH) were detected at concentrations up to 18,000 ppm. Groundwater samples revealed the presence of low levels of VOCs, SVOCs, TPH, polychlorinated biphenyls, total cyanide, pesticides, and metals. The direction of groundwater flow on the site is reported to be towards the south-

southeast. The depths to groundwater ranged from 2.5 to 9.5 feet below ground surface. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-0248, Mobil Station (former) (Site 2)

This confirmed site is located at 425 Summer Street at the corner of D Street, within the Summer Street Parcel. A preliminary site assessment was done on the site in June, 1985. Total petroleum hydrocarbon (TPH) contamination was discovered in soils around a former tank area. TPH levels in groundwater were measured at levels of 330 mg/l. The contamination was concluded to be caused by minor fuel filling spills and tank leakage. Subsequently, four underground storage tanks (USTs) were removed in 1984 and the contaminated soils excavated and disposed of off-site. The general direction of groundwater flow was reported to be towards the northeast. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-1049, Bonney's Express (Site 3)

This LTBI site is located at 320 D St., on the corner of W. First St. and D St., approximately 0.1 miles south of the parcel. TPH contamination at a concentration of 21 mg/l was detected in groundwater monitoring wells. Three USTs, which were apparently leaking, were removed on August 3, 1987. In addition, 150 cubic yards of contaminated soil was removed from the site in 1988 (presumably originating from the UST excavations). No information was available in the file that indicated the general direction of groundwater flow. No further information was available at the time of EARTH TECH's review. Further investigation would be necessary to determine whether this contamination would affect the Summer Street Parcel.

DEP Site # 3-0580, Boston Junk Co. (Site 4)

This site, which is within the Summer Street Parcel, is classified by the DEP as a Priority Confirmed site, and is also listed on the EPA Comprehensive Environmental Response Compensation and Liability Act Information System (CERCLIS).

Boston Junk (also known as Boston Iron and Metal Co.) is a salvage yard and dealer in scrap metal located at 14 Louis Street in the southwest portion of the parcel. The site encompasses an area of approximately 1.5 acres bordered to the southwest by West First Street, and to the southeast by Summer Street. The salvage yard was in operation from 1947 to 1985. The type of material accepted by the salvage yard included wire, cable, iron, boilers, steel, motors, generators, transformers, and capacitors. Files at DEP contained numerous manifests/requisitions for scrap transformers, etc. from the Boston Edison Company (BECO) to Boston Junk.

An environmental site assessment was completed in 1985 on the Conrail property which abuts the Boston Junk property to the northwest. Approximately 20 to 40

electrical transformers were observed in a pile of debris between West First and Cypher Streets. In 1984, the Boston Fire Department responded to numerous fires at the salvage yard. The disassembly of transformers with a blow torch was observed on the Boston Junk site. When the transformers caught fire, the fires were extinguished by Boston Junk employees with water from a water truck. Runoff was observed from this operation flowing onto the Conrail property. Soil samples from the Conrail property contained PCBs at concentrations up to 240 ppm, which exceeded regulatory thresholds of 2 ppm.

EPA performed a site inspection of the salvage yard on August 20, 1985. Samples of fluid from leaking capacitors on the Boston Junk site contained PCB Aroclor 1254 at 96% (960,000 ppm) and PCB Aroclor 1242 at 100%. Oil-stained soil samples from the site contained Aroclor 1242 at 13% and Aroclor 1260 at 2900 ppm, which exceed regulatory risk thresholds of 2 ppm. A PCB cleanup program was reportedly prepared for the site. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-0247, North Shore Recyclers (Site 5)

No files were available at the time of EARTH TECH's review at the DEP. The site is adjacent to the Summer Street Parcel and is listed by the DEP as an unclassified confirmed disposal site where petroleum and hazardous materials were released. Documentation reviewed in other site files contained records of transformer scrap removals from Boston Junk by North Shore Recyclers. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-1918, South Postal Annex (Site 6)

This site is located at 135 A Street, approximately 0.1 miles west of the Summer Street Parcel. The site is the vehicle maintenance facility for the U.S. Postal Service. A Notice of Responsibility (NOR) was issued by DEP due to the detection of petroleum product (gasoline) in a trench/manhole adjacent to the facility on A Street. Possible sources include numerous existing and former underground and above-ground storage tanks. Also, numerous floor drains are present within the facility buildings. BTEX, TPH, and metals were detected in groundwater samples on the site and strong odors were observed during the boring program. The depth to groundwater on the site is approximately five feet and the flow is reported to be likely towards the east/northeast towards the Summer Street Parcel. The current site status is unclassified confirmed. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-2401, Ryder Truck Rental (Site 7)

This site is located at 280 West First Street, approximately 0.1 miles south of the Summer Street Parcel. A Phase II Comprehensive Site Assessment was completed at the site in September 1993 and indicated the presence of volatile aromatic compounds, polynuclear aromatic hydrocarbons, phenolic compounds, petroleum hydrocarbons, and metals in the groundwater and soil. Concentrations of BTEX, lead, and mercury were detected in groundwater above established EPA drinking water guidelines. A soil gas survey indicated the presence of BTEX, and other volatile hydrocarbons. Free-phase floating petroleum product was detected in two wells. A free-phase petroleum product recovery system has reportedly been designed and installed at the site. The depth to groundwater on the site is approximately eight to ten feet below ground surface. The groundwater contour map developed for this site indicates slight mounding in the middle of the site which causes radial flow both towards the northwest, towards the Summer Street Parcel, and the southeast, away from the parcel. The site is currently operating under a DEP "Waiver of Approvals". No further information was available at the time of EARTH TECH's review.

DEP Site # 3-2447, U.S. Army Reserve Center (Site 8)

This site is located at 495 Summer Street, approximately 0.1 miles east of the parcel. In January 1993 a subsurface site investigation was conducted at this site "to determine the nature and extent of any environmentally impacted soil and groundwater at the site, and differentiate on-site contamination from off-site contamination." Elevated levels of lead (4,700 mg/kg) and arsenic (52.2 mg/kg) were detected in on-site soils; elevated levels of total petroleum hydrocarbons (1,200 mg/kg) were detected in several soil borings; polynuclear aromatic hydrocarbons were detected at elevated concentrations (266 mg/kg) in soil borings; and BTEX compounds were detected at elevated concentrations (14.1 mg/kg total BTEX). Two groundwater wells revealed the presence of TPH, phthalates, BTEX, and phenols. The report concluded that the observed groundwater contamination was likely from an off-site source and the observed soil contamination is likely due to urban fill. Depths to groundwater on the site ranged from approximately one to twelve feet below ground surface. A groundwater divide appears to exist on the site; groundwater is interpreted to flow both towards the west, and towards the Summer Street Parcel, and the east, away from the Summer Street Parcel. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-0198, Grant Rental (Site 1)

An additional site, which was not listed in the LTBI but appeared in other files, is the Grant Rental site located at 442 D Street in the northeastern portion of the Summer Street Parcel. According to this information, a truck rental and service facility was

located at this facility. Site investigations performed on the property concluded that soil and groundwater beneath the site are contaminated by petroleum products. Although no further information was available at the time of our review, EARTH TECH believes that this site is a portion of DEP Site 3-4754 and, as such, may not be listed separately as a single entity.

DEP Site # 3-1284, Advanced Viaduct/Canal

No information was available at the time of EARTH TECH's review.

DEP Site # 3-1286, Industrial Property (Site 9)

No information was available at the time of EARTH TECH's review.

DEP Site # 3-2966, Gillette Co., 35 Mt. Washington St. (Site 10)

No information was available at the time of EARTH TECH's review.

DEP Site # 3-4365, Gillette Co., 1 Gillette Park (Site 11)

The site is located within the northern portion of the parcel. A Release Abatement Measure (RAM) was performed in September 1994 at the north end of the Gillette property in South Boston. The objective of the RAM was to remove an abandoned concrete structure and associated petroleum-contaminated soil. Approximately 120 cubic yards of petroleum-contaminated soil and concrete were excavated for disposal at an asphalt batching plant. All of the petroleum-contaminated soil was not excavated and will reportedly be removed during excavation for the proposed Gillette Circulating Water System (CWS) Intake Structure. VOCs, PAHs, PCBs, TPH and metals were detected in the excavated soils. The site is currently listed as an LTBI by the DEP. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-3826, New England Telephone, 343 Congress St. (Site 12)

The site is located approximately 0.1 miles north of the parcel. Emergency response measures were performed at the site in 1990. The measures were undertaken in response to a release of gasoline while filling a UST in an alley between the New England Telephone (NET) building and 347 Congress St. According to the report, 10 gallons of petroleum were released to the ground surface. Subsequent to the clean-up of the spill, workers in the adjacent office building complained of gasoline vapors. The Boston Fire Department responded and determined that the building should be evacuated. On November 10, 1990, the gasoline UST failed a tightness test and it was determined that the piping to the tank was leaking. Approximately 105 cubic yards of contaminated soil was removed from the site. A recovery well and seven soil borings were also completed due to the presence of a sheen on the

water table. The depth-to-water was approximately 9 feet. An active ventilation system was also installed in the adjacent building. Approximately 3900 gallons of petroleum-contaminated groundwater was pumped from the excavation and the recovery well. The boring program detected petroleum related contamination, resembling #2 fuel oil, at depths coincident with the groundwater table. Subsequent tightness testing of the on-site #2 fuel oil tank did not indicate a leak in the tank or associated piping. Concentrations of TPH detected in soil samples collected at the water table exceeded DEP guidelines for on-site reuse. The site is currently listed as an LTBI by the DEP. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-4507, New England Telephone, 649 Summer Street (Site 13)

The site is located approximately 0.1 miles south of the parcel. A Release Categorization Form, dated September 13, 1993, was submitted due to the identification of gasoline contaminated soil during the removal of a 5000-gallon UST. The UST was observed to have a hole in it during removal. A 500-gallon waste oil UST and a 500-gallon motor oil UST were previously removed from the site. Approximately 50 cubic yards of contaminated soil was excavated during the UST removal. The site is currently listed as an LTBI by the DEP. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-4363, Boston Wharf Co. (Site 14)

The site is located at 44 Farnsworth Street, approximately 0.25 miles to the northeast of the parcel. A cover letter and a DEP OHM Spill/Release Incident Report were filed with the DEP. During the removal of a 3000-gallon #2 fuel oil UST, heavily contaminated soil was encountered. The DEP authorized the excavation of the heavily contaminated soil and confirmatory soil and groundwater sampling from the tank excavation. The site is currently listed as an LTBI by the DEP. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-0636, (former) Farnsworth Fiber Co. (Site 15)

The site is located at 24 Farnsworth Street, approximately 0.2 miles to the northeast of the parcel. An initial remedial measures report, dated March 17, 1987, was prepared to document the evaluation and remediation of a release of a paraffinic base oil (Rando Oil™) at the property. In addition to the significantly contaminated soil, significant quantities of separate phase oil (up to 2 feet) was observed in monitoring wells located in the basement of the site building. Based on observations made in monitoring wells located around the perimeter of the building it does not appear that significant quantities of the oil had migrated beyond the foundation walls. An initial response measure was proposed to recover the floating separate phase oil. The source of the oil is suspected to be two 3000-gallon USTs. Groundwater flow on the

site is estimated to be towards the west and the Fort Point Channel. The site is currently under a DEP Waiver of Approvals. No further information was available at the time of EARTH TECH's review.

DEP Site # 3-2809, Harbor Gateway Industrial Park (Site 16)

The site is located at 1 - 9 Drydock Avenue, approximately 0.1 miles to the east of the parcel. A Phase II - Comprehensive Site Assessment, dated December 1991, was prepared for the site. The site was subdivided into two sites referred to as the Building 126 - Harbor Gateway site (7.3 acres) and the Building 20 site (1 acre). The Building 126 site was formerly used as an Army gasoline station (USTs removed in 1987). The Building 20 site was formerly utilized as the Army base heating plant (USTs removed in 1987). The Phase II assessment concluded that releases of petroleum product had occurred on both sites (VOCs at Building 126 site and heavy oils at Building 20 site) and revealed the highly industrialized nature of the fill soils on both sites. Also, 1000 to 1500 cubic yards of PCB contaminated soil (< 50 ppm) was backfilled into the excavation created by the tank removal on the Building 20 site. The water table is reported to be within 10 feet of the ground surface. Groundwater on the northern portion of the property appears to flow to the northeast towards the Drydock Channel, while groundwater on the southern portion of the property appears to flow to the south towards the Reserved Channel. A draft Phase III - Remedial Response Alternative and Final Remedial Response Plan, dated December, 1991, was also prepared for both sites. The site is currently under a DEP Waiver of Approvals. No further information was available at the time of EARTH TECH's review.

2.6 Sanborn Fire Insurance Map Review

Sanborn fire insurance maps were obtained by EARTH TECH to review historic land uses within the Summer Street Parcel. Map coverage included the years 1888, 1899, 1923, 1950, 1964, 1990 and 1994. No map coverage was available for the portion of the site to the southeast of E Street. Potential source sites/land uses were identified and are listed in Table 2-6.

Historically, food and general warehousing and distribution and the Boston Freight Terminal railyard were the predominant land uses on the parcel. After 1964, trucking and heavy equipment storage and maintenance became prevalent on the parcel between B and E Streets. Prior to 1990, the majority of the site to the northwest of B Street was converted to use as parking.

Table 2-6: Sanborn Map Summary - Summer Street Parcel

Address	Potential Source (Contaminants)	Map Date
B, Louis, C, and Fargo Streets Block		
C, Summer and Fargo Sts.	Iron Works (metals)	1899, 1923
Anchor (Louis) and C Sts.	Cooper Shop (metals)	1899, 1923
Summer and C Sts.	Western Electric Supplies and Repair (petroleum, SVOCs, metals)	1923
Between B, Fargo and Anchor (Louis) Sts.	Freight Yard (petroleum, SVOCs, metals)	1923, 1950, 1964, 1990, 1994. Majority of freight yard removed prior to 1990.
385 C St.	Barrel Storage (unknown)	1950
Louis St.	Scrap Yard (Boston Junk; PCBs, petroleum, metals)	1964, 1990, 1994
B and Fargo Sts.	Heating Plant and Fuel Storage (petroleum)	1964
401 C St.	Motor Freight Station (petroleum)	1990
20,22 Cypher St.	Gas Station and Truck Maintenance (Four T's Truck Stop; petroleum, solvents)	1990, 1994
C St.	Boston Heliport (probable USTs; petroleum)	1994
C, Cypher, D and Summer Sts Block		
D and Fargo Sts.	Colonial Steel Co. (metals, solvents)	1923
C and Egmont Sts.	Lowe Bros. Co. Paint Warehouse (metals, SVOCs, solvents)	1923, 1950
D St.	State Garage & Repair Shop US Post Garage & Repair Shop (petroleum, solvents)	1923
D and Cypher Sts.	F.E. Atteaux & Co. Dye Stuff Manufacturing (metals, solvents)	1923
Bullock and Fargo Sts.	Motor Freight Station (petroleum)	1950, 1964
D St.	Mass. DPW Equip. Storage and Repair (petroleum, solvents)	1950, 1964, 1988, 1990, 1994
D St.	Private Garage (petroleum, solvents)	1950
C and Claflin Sts.	Showers Manufacturing (metals, solvents)	1964

Table 2-6 (Cont'd)

Address	Potential Source (Contaminants)	Map Date
D St.	Auto Repair (petroleum, solvents)	1964, 1988, 1990, 1994
West First St.	Chemical Warehouse (VOCs, SVOCs, petroleum, metals)	1964, 1988, 1990, 1994
Claflin and C Sts.	Bindery (VOCs, SVOCs)	1988, 1990, 1994
Fort Point Channel, Mt. Washington, A, Wormwood, B and Summer Sts. Block		
Mt. Washington and A Sts.	Coal Co. (petroleum, metals)	1888, 1899
Between A and B Sts.	Freight Yard (SVOCs, petroleum, metals, PCBs)	1888, 1899, 1923, 1950, 1964, 1990, 1994 (decreased in size significantly between 1964 and 1990)
A Street (between Wormwood and Summer Sts.)	Tyler Bros. Tube Mill (petroleum, unknown)	1888
A Street (between Wormwood and Summer Sts.)	Oil House (petroleum, SVOCs)	1888, 1899, 1923, 1950, 1964
A Street (between Wormwood and Summer Sts.)	Freight Yard Roundhouse (petroleum, SVOCs)	1888, 1899, 1923
A Street (opposite Binford St.)	Lombard & Co. Grindstone Manufacturing (petroleum, solvents, metals)	1899, 1923
A Street (between Wormwood and Summer Sts.)	Albert & J.M. Anderson Machine Shop (solvents, petroleum, metals)	1899, 1923, 1950, 1964
A Street (between Wormwood and Summer Sts.)	Boston Plate & Window Glass Co. (metals)	1899, 1923, 1950, 1964
A Street (opposite Binford St.)	Hide Storehouse (metals)	1923
A St. and Necco Court	George E. Keith Co. Shoe Factory (solvents, metals)	1923
Necco Court	Machine Shop (solvents, petroleum, metals)	1923
Necco Court	Auto Repair (solvents, petroleum)	1950
A Street	Filling Station (petroleum)	1950, 1964
Mt. Washington St.	Dehydrating Process Co. (fish processing; unknown)	1950
A Street (between Wormwood and Summer Sts.)	Machine Shop (at former roundhouse location; solvents, petroleum, metals)	1950, 1964
A Street (between Wormwood and Summer Sts.)	Paint Shop (at former roundhouse location; dyes, metals, solvents)	1950, 1964

Table 2-7: Sites Summary - Summer Street Parcel

Site Name and Address	DEP Ref. No.	Contaminants	Affected Media	Depth to Water/Flow Direction	Regulatory Status	Sources/Comments
OHM Sites						
Bonney's Express 320 D. St.	3-1049	Petroleum	soil, gw	NA	LTBI	Leaking USTs. 150 yds of soil removed.
Boston Junk 14 Louis St.	3-0580	Pet.; Haz	undet	NA	Priority Confirmed	Received scrap transformers from BECo. PCBs detected on-site.
Boston W&S Comm. Fargo & D STs	3-4754	Pet., Haz	soil, gw	2.5 to 9.5 feet	Waiver	Assessment performed for construction of headquarters.
Mobil Oil Co. (FMR) 425 Summer St.	3-0248	Petroleum	soil, gw	NA	Confirmed	File unavailable at DEP, separate phase gasoline detected on-site.
North Shore Recyclers B & West 1st & Cypher STs	3-0247	Pet., Haz.	undet	NA	Unclassified Confirmed	File unavailable at DEP, removed scrap transformers from Boston Junk.
Ryder Truck Rental 280 West 1st	3-2401	Pet.; Haz	soil, gw	NA	Waiver	Active fuel dispensing system and USTs on site. Separate phase petroleum detected on-site.
South Postal Annex 135 A St.	3-1918	Petroleum	soil, gw	5 to 5.5 feet	Unclassified Confirmed	USTs and possibly floor drains.
US Army Reserve Center 495 E St.	3-2447	Pet., Haz	soil, gw	Approx. 5 to 10 feet	LTBI	BTEX, metals, TPH and PAHs detected at elevated concentrations in soils. TPH, BTEX, phthalates and phenols detected in groundwater.
Gillette Company 1 Gillette Park	3-4365	Pet. Haz	soil	NA	RAM	VOCs, PAHs, PCBs, TPH and metals were detected in excavated soils.
New England Telephone 343 Congress Street	3-3826	Petroleum	soil, gw	9 feet	LTBI	TPH contaminated soils from leaking UST removed. TPH recovered from water table.
New England Telephone 649 Summer Street	3-4507	Petroleum	soil	Approximately 5 feet	LTBI	TPH contaminated soils from UST removal
Boston Wharf Co. 44 Farnsworth Street	3-4363	Petroleum	soil	Approximately 9 feet	LTBI	TPH contaminated soils from UST removal
Farnsworth Fiber Co. 24 Farnsworth Street	3-0636	Petroleum	soil, gw	Approximately 10 feet	Waiver	Release of parrafinic oil from USTs. Floating product on water table
Harbor Gateway Industrial Park 1-9 Drydock Ave.	3-2809	Pet., Haz	soil, gw	Approximately 10 feet	Waiver	TPH, VOCs, PCBs released to soil from UST.

Site Name and Address	DEP Ref. No.	Contaminants	Affected Media	Depth to Water/Flow Direction	Regulatory Status	Sources/Comments
CERCLIS Sites						
Defense Support Activity (U.S. Army Reserve Center)	3-2447	Pet., Haz	soil, gw	Approx. 5 to 10 feet	LTBI	BTEX, metals, TPH and PAHs detected at elevated concentrations in soils. TPH, BTEX, phthalates and phenols detected in groundwater.
Boston Junk	3-0580	Pet., Haz	N/A	N/A	Priority Confirmed	BTEX, metals, TPH and PAHs detected at elevated concentrations in soils. TPH, BTEX, phthalates and phenols detected in groundwater.
U.S. Postal Service (South Postal Annex)	3-1918	Petroleum	N/A	N/A	Unclassified Confirmed	BTEX, metals, TPH and PAHs detected at elevated concentrations in soils. TPH, BTEX, phthalates and phenols detected in groundwater.
Registered USTs						
Four T's Truck Stop	N/A	N/A	N/A	N/A	N/A	Currently active fuel dispensing station.
Package Chemical Co.	N/A	N/A	N/A	N/A	N/A	Petroleum products and chlorinated solvents used on-site.
Ryder Truck Rental	N/A	N/A	N/A	N/A	N/A	Currently active fuel dispensing station.
Shaughnessy Cos.	N/A	N/A	N/A	N/A	N/A	Currently active fuel dispensing station.
Massachusetts Highway Department	N/A	N/A	N/A	N/A	N/A	CA/T activities on site.
Trafalgar Square Realty	N/A	N/A	N/A	N/A	N/A	

NOTES:

GW = groundwater
Pet - petroleum
Haz = hazardous material constituents
N/A = not applicable
NA = not available

identified. Although information is available which indicates that a PCB cleanup program has been developed, no additional information regarding the cleanup status was available in DEP files. Should significant amounts of PCB contamination remain on site, focused remediation may be required prior to general construction.

A significant portion of the Summer Street Parcel is the location of a former freight yard. Although no site-specific information was available regarding the railyard, it is EARTH TECH's opinion that, due to the long history and nature of site usage, this site is likely to be an area of concern from the standpoint of potentially-large volumes of SVOC-contaminated soil. PCB and metals contamination is also possible. Other sites that were identified are likely to result only in localized areas of concern.

The South Postal Annex may also represent a location of concern. While it is not within the Summer Street Parcel, it is close enough to have a potential impact on construction activities if the Annex is a source of gasoline contamination in groundwater that has migrated off site.

Further information is required concerning the cleanup status of Boston Junk and other sites of concern. Since site owners often do not update DEP regularly, it may be necessary to contact site owners directly. In the event that sufficient information is not available, a parcel-wide site assessment may be required. At such time, discussions with DEP may allow the parcel to be treated as one MCP site, rather than several separate sites, which would facilitate a smoother regulatory/administrative process.

2.10 Recommendations/MCP Regulatory Process - Summer Street Parcel

Due to the episodic nature of assessment and remediation activities at oil/hazardous material sites, updating of regulatory files concerning the sites is periodic at best, and may be negligible in the cases of less diligent site owners. While the information presented here represents what is currently available from relevant files, in many instances, the information is one or more years old, and site conditions may have changed significantly if remedial actions have been taken during the intervening period, or natural conditions have caused slow dissipation of site contamination with time. Thus, for the sites already identified, particularly the Boston Junk Yard (where PCBs appear to be an acute problem), further efforts may be advisable to obtain updated information on the status of site conditions either by contacting the site owners or further inquiry of DEP/EPA.

If the Summer Street Parcel becomes the preferred parcel, and in the absence of MCP Phase II/CERCLA Remedial Investigation-level site studies, DCPO may wish to investigate means of obtaining access to critical locations in order to conduct its

own assessment/sampling program. Such a program would address the parcel as a whole in terms of soil and groundwater quality, and direction of groundwater flow.

From a regulatory standpoint, it is important to note that the sites within the Summer Street Parcel boundaries are at virtually every point in the regulatory process and status, from Preliminary Assessment to (potentially) remediation and from Non-Priority to Priority. If these sites are acquired in anticipation of project construction, it will be necessary to maintain compliance for each individual site. Moreover, most of the sites entered the regulatory process under the old (1988) MCP, and several have Waivers, which allow them to operate for up to five years from Waiver approval date under the old system. However, at the end of this 5-year period (which may be a different date for every site), each site will require reports, Tier Classifications, and forms to be submitted to DEP to bring them into compliance with the new (1995) MCP.

Thus, it may be advantageous to approach DEP concerning the feasibility of dealing with all oil/hazardous material issues at the Summer Street Parcel under one site number and entirely under the new MCP. Moreover, it would be advantageous to reach an understanding with DEP concerning the levels of cleanup required given the new site use, and the thresholds that must be met for situations such as pumping and discharge of contaminated water, given that extended pumping may draw contamination into construction excavations from sources over which the project developer would have no control.

Given the potential ubiquity of at least moderate levels of soil contamination, it may also be wise to begin planning of facility design to require the least amount of soil disturbance possible. Slab-on-grade with driven-pile foundation construction would minimize the amount of excavation and dewatering required, and might also allow higher levels of contamination to be left in place. It is suggested that plans such as underground parking are probably less desirable from a soil/groundwater management standpoint.

N E W E N G L A N D

ROBERT K. KRAFT

By Hand

May 30, 1995

Honorable Kevin W. Fitzgerald
Representative
Chapter 6, Acts of 1995 Commission
The State House
Room 128
Boston, MA 02133

Honorable Robert E. Travaglini
Senator
Chapter 6, Acts of 1995 Commission
The State House
Room 511B
Boston, MA 02133

Dear Mr. Chairmen:

I am very excited about the direction and results to date of your Commission's efforts. The foundation of a groundbreaking public/private partnership has been laid and your commitment and diligence in getting to this point is admirable.

Through your efforts the Commonwealth is on the verge of creating an asset that will last decades and generate hundreds of millions of dollars in economic activity as well as thousands of jobs.

I'm glad that the Patriots have been able to play a role in this project. At a time when other sports teams are getting new facilities built with 100% public money, I'm proud that the Patriots' commitment of over $150,000,000, including operating expenses, will be used to help finance an asset that will be available to benefit our community over 330 days a year when the Patriots are not using it.

In addition, I want to reiterate the commitment that Commissioner Tagliabue expressed in his letter of May 23, 1995 pledging his support for bringing the Superbowl to the Commonwealth's new stadium as soon as it is constructed. I have also talked personally to many of my fellow owners and they have all pledged their support as well.

As the process continues, my organization and I stand ready to assist you in any way you deem appropriate.

Sincerely,

Robert Kraft

NEW ENGLAND PATRIOTS L.P.
ONE BOSTON PLACE • BOSTON, MASSACHUSETTS 02108 • TELEPHONE (617) 723-4141 • FAX (617) 248-8939
FOXBORO STADIUM • 60 WASHINGTON STREET • FOXBORO, MASSACHUSETTS 02035 • (508) 543-7940 • FAX (508) 543-7942

NATIONAL FOOTBALL LEAGUE

May 23, 1995

Honorable Kevin W. Fitzgerald
Representative
The State House
Room 128
Boston, MA 02133

Honorable Robert E. Travaglini
Senator
The State House
Room 511B
Boston, MA 02133

Dear Representative Fitzgerald and Senator Travaglini:

The National Football League believes that first-class stadium facilities are critical to the long-term success of our franchises. To this end, I was pleased to hear that your Commission and the New England Patriots have reached an agreement in principle that will lead to the construction of a new convention center and domed stadium in downtown Boston.

Furthermore, I want to reiterate that I will make a strong recommendation and use my best efforts as Commissioner of the National Football League to ensure that the Super Bowl is designated to be played in Boston's domed stadium as soon as possible after its opening.

Currently, the League's membership is operating under a timetable and format for the selection of Super Bowl sites that has already allotted a number of candidates for the game through January of the year 2000, that is, following the 1999 season. On this selection timetable, the Megaplex would be a candidate for the Super Bowl as early as January 2001.

Sincerely,

PAUL TAGLIABUE
Commissioner

PT:dcm

410 Park Avenue, New York, New York 10022 (212) 758-1500 FAX (212) 758-1742

BOSTON RED SOX™

FENWAY PARK 4 YAWKEY WAY BOSTON, MASSACHUSETTS 02215
617-267-9440

May 31, 1995

Honorable Kevin W. Fitzgerald
Representative
Ch. 6, Acts of 1995 Commission
The State House
Room 128
Boston, MA 02133

Honorable Robert E. Travaglini
Senator
Ch. 6, Acts of 1995 Commission
The State House
Room 511B
Boston, MA 02133

Dear Chairmen:

As you know, the Red Sox wish to keep their home in Boston. We are pleased that, by working with the Commission, we have commenced the process, in accordance with your proposal to us, of attempting to structure a public/private partnership that will benefit the Commonwealth, the City of Boston, the Red Sox and their loyal fans.

The Red Sox anticipate that, subject to negotiating a comprehensive arrangement acceptable to all parties, they will invest $150 million of capital towards the entire cost of a new baseball stadium along the Fort Point Channel. In addition, the Red Sox anticipate they will pay all operating expenses for their use of this facility. We are extremely pleased to work to structure a public/ private partnership involving this substantial investment by the Red Sox (along with your investment). As you know, this is the largest private investment made in a stadium by any sports team.

We are confident that this new stadium, in a waterfront site overlooking Boston's downtown skyline, will have no equal in the world. We also concur with you that a state of the art ballpark will generate markedly increased economic activity within the Commonwealth.

The Red Sox are eager to continue working with you to effectuate this groundbreaking public private venture.

Very truly yours,

John S. Buckley
Executive Vice President

JSB:ll

PUBLIC FINANCIAL MANAGEMENT, INC.

CHAPTER 6, ACTS OF 1995 COMMISSION

REPORT TO
THE COMMISSION
FISCAL SUBCOMMITTEE

June 1, 1995

Public Financial Management, Inc.
99 Summer Street, Suite 1020
Boston, MA 02110-1240

REPORT TO THE COMMISSION
FISCAL SUBCOMMITTEE

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1. Overview of Comparable Facilities

Public Financial Management, Inc. ("PFM") has been retained by the Chapter 6 "Megaplex" Commission (the "Commission") to provide assistance in examining the costs and financing alternatives that are available to fund the proposed Megaplex development, i.e. the proposed convention center and football stadium that is to be located on a site in downtown Boston. Several areas were examined in order to construct an overview of the economics of financing and operating a convention center/stadium facility. These areas included: the financing structures available for funding these types of facilities; information regarding the construction and financing of comparable facilities and identification of revenue sources, both public and private which could be used to support these types of facilities.

PFM surveyed 16 comparable facilities which consisted of a convention center at least 450,000 square feet in size and those combined facilities which consisted of both convention space and a sports facility. These facilities were examined to compare the construction and financing costs of each facility as well as the type of financing structure that was utilized to finance the facility. It is interesting to note that of the facilities surveyed, the majority of facilities which were constructed prior to the mid-1980's were primarily financed by general obligation bonds ("G.O. bonds") of the municipality in which the facility was being developed. The more recently constructed facilities however, have almost exclusively been funded by revenue bonds. The revenue bond structure utilizes a specific stream of revenues, i.e. a dedicated tax or fee that is utilized by the public entity to pay debt service on the bonds. The governmental entity does not pledge its taxing power to pay the debt service on the bonds. Even those projects which consist of expansions of older facilities which were financed with G.O. bonds utilized revenue bonds to finance their additions. We believe that this trend developed as states and municipalities began to experience more financial pressures to finance 'public purpose' capital projects such as schools which can only be financed utilizing G.O. bonds utilizing tax revenues whereas projects such as convention centers can look to other revenue streams for support. The survey also revealed that while a wide variety of different types of revenues have been pledged, including rental car taxes and liquor and cigarette taxes, the most often used revenue stream was some form of hotel/motel tax, aimed at drawing revenues from the proposed users of the convention facilities. The results also showed that the newer facilities and those of larger sizes committed a number of different revenue streams in support of a project rather than depending on a single stream to meet the requirements of debt service. The results of the survey are contained at the end of this section.

Commonwealth of Massachusetts
Boston Megaplex Project
Summary of Comparative Facilities

Convention Center/ Football Stadium	Location	Date(s)	Total Exhibition Space	Total Meeting Space	Seating Capacity	Facility/ Renovation Cost	Method of Financing
Georgia World Congress Center	Atlanta, GA	Opened: 1974 Expansion: 1984 Expansion: 1992	350,000 sq. ft. 650,000 sq. ft. 950,000 sq. ft.	230,000 sq. ft.		$35.0 million $103.0 million $98.0 million	State G.O. Bonds State G.O. Bonds State G.O. Bonds
GeorgiaDome	Atlanta, GA	Opened: 1992	102,000 sq. ft.		71,500 seats	$214.0 million	Revenue Bonds repaid from Atlanta hotel tax and premium seating revenue.
Cervantes Convention Center	St. Louis, MO	Opened: 1977 Expansion: 1993	240,000 sq. ft. 340,000 sq. ft.			$30.0 million $130.0 million	City Revenue Bonds (restaurant tax and hotel room surcharge) Authority Lease Revenue Bonds (appropriations from City)
America's Center (Domed Stadium)	St. Louis, MO	Opened: 1995	162,000 sq. ft.		70,000 seats	$265.0 million	Authority Lease Revenue Bonds (appropriations from City (25%), County (25%) and State (50%))
Baltimore Convention Center	Baltimore, MD	Opened: 1979 Expansion: 1997	195,000 sq. ft. 300,000 sq. ft.			$51.0 million $155.0 million	$35 million State G.O. Bonds; $16 million City G.O. Bonds $55 million MD Stadium Auth. Lease Appropriation Bonds (State appropriation from sales tax), $50 million State G.O. Bonds and $50 million City Hotel Tax Revenue Bonds
Los Angeles Convention Center	Los Angeles, CA	Opened: 1971 Expansion: 1980 Expansion: 1985	210,000 sq. ft. 310,000 sq. ft. 685,000 sq. ft.	39,000 sq. ft. 39,000 sq. ft. 125,000 sq. ft.		$35.0 million $500.0 million	City COPs City Revenue Bonds (TOT increases in 1985, 1987 and 1992)
San Diego Convention Center	San Diego, CA	Opened: 1989 Expansion: 1998	254,000 sq. ft. 546,000 sq. ft.	140,000 sq. ft. 200,000 sq. ft.		$160.0 million $150.0 million	Cash from the San Diego Unified Port District City COPs (offset by previous TOT increase)
Moscone Center	San Francisco, CA	Opened: 1981 Expansion: 1992	250,000 sq. ft. 442,000 sq. ft.				$90 million City Hotel Tax Revenue Bonds $28 million City Hotel Tax Revenue Bonds
Cobo Convention and Exposition Center	Detroit, MI	Opened: 1960 Expansion: 1989	400,000 sq. ft. 700,000 sq. ft.	50 meeting rooms 200,000 sq. ft. 84 meeting rooms		$94.0 million $240.0 million	City G.O. Bonds City Hotel Tax Revenue Bonds

Commonwealth of Massachusetts
Boston Megaplex Project
Summary of Comparative Facilities

Convention Center/ Football Stadium	Location	Date(s)	Total Exhibition Space	Total Meeting Space	Seating Capacity	Facility/ Renovation Cost	Method of Financing
Indiana Convention Center and RCA Dome	Indianapolis, IN	Opened: 1972	124,000 sq. ft.			$15.5 million	Marion County G.O. Bonds
		Expansion: 1982	206,500 sq. ft.		60,500 seats	$94.7 million	$35 million private grants and $47.25 million County Revenue Bonds (5% hotel and 1% food and beverage taxes)
	Indianapolis, IN	Renovation: 1993	206,500 sq. ft.		60,500 seats	$43.0 million	County Revenue Bonds (hotel, food and beverage, professional sports admission and cigarette taxes)
McCormick Place Complex	Chicago, Il	Opened: 1960	320,000 sq. ft.	23 meeting rooms		$41.8 million	State Horse-racing Tax Revenue Bonds (1%)
		Fire in 1967					
		Rebuilt: 1971	522,000 sq. ft.	20 meeting rooms		n/a	$15 million State appropriation and State Revenue Bonds (horse-racing and cigarette taxes)
		Expansion: 1977	822,000 sq. ft.	25 meeting rooms		n/a	State Cigarette Tax Revenue Bonds (purchased in 1986)
		Expansion: 1985	1,600,000 sq. ft.	25 meeting rooms		$312.0 million	$252 million State Hotel Tax Revenue Bonds and $60 million State Sales Tax Revenue Bonds
		Expansion: 1997	2,200,000 sq. ft.	25 meeting rooms		$987.0 million	State G.O. Bonds (repaid through 2.5% City hotel tax, 1% City restaurant tax, $1 airport trans. tax, Cook Co. car rental tax
Ernest N. Morial Convention Center	New Orleans, LA	Opened: 1984	327,261 sq. ft.	73,102 sq. ft.		$95.4 million	$48 million City Hotel/Motel Tax Bonds (2% increase), $29.6 million State G.O. Bonds and $19.5 million grants
		Expansion: 1991	667,469 sq. ft.	136,211 sq. ft.		$126.5 million	$60.3 million City Hotel/Motel Tax Bonds (progressive), $49.7 million State G.O. Bonds; $15.4 million grants and earnings
		Expansion: 1998	1,070,969 sq. ft.	242,961 sq. ft.		$247.7 million	$136 million State G.O. Bonds, $91 million Bus Tour Tax Revenue Bonds and $20 million City contribution
Louisiana Superdome	New Orleans, LA	Opened: 1975	166,000 sq. ft.	77,000 sq. ft.	72,968 seats	$163.0 million	State Hotel/Motel Tax Bonds (4% in local area)
		Renovation: 1996			75,000 seats	$20.0 million	State Hotel/Motel Tax Bonds
Jacob K. Javits Convention Center	New York, NY	Opened: 1986	640,000 sq. ft.				$375 million Lease Revenue Bonds issued through Triborough Bridge and Tunnel Authority and $106 million state appropriated Municipal Assistance Corporation monies
Pennsylvania Convention Center	Philadelphia, PA	Opened: 1994	440,000 sq. ft.	90,000 sq. ft.		$522.0 million	$277 million Hotel Tax Revenue Bonds; City and State Grants; Hotel Tax Revenues

Commonwealth of Massachusetts
Boston Megaplex Project
Summary of Comparative Facilities

Convention Center/ Football Stadium	Location	Date(s)	Total Exhibition Space	Total Meeting Space	Seating Capacity	Facility/ Renovation Cost	Method of Financing
Dallas Convention Center	Dallas, TX	Opened: 1957	73,000 sq. ft.	20,000 sq. ft.		$8.9 million	City G.O. Bonds
		Expansion: 1973				$32.0 million	City Tax Bonds (hotel/motel and alcoholic beverage)
		Expansion: 1984				$33.0 million	City Tax Bonds (2% increase)
		Expansion: 1994	524,000 sq. ft.	116,000 sq. ft.		$90.9 million	City Tax Bonds (1% increase)
George R. Brown Convention Center	Houston, TX	Opened: 1987	470,500 sq. ft.	50 meeting rooms		$130.0 million	City Revenue Bonds (5% hotel tax, gross parking receipts)
Astrodome	Houston, TX	Opened: 1964	1,059,000 sq. ft.		45,000 seats	$31.6 million	County Hotel/Motel Occupancy Tax Revenue Bonds, Private funding from owner
Henry B. Gonzales Convention Center	San Antonio, TX	Opened: 1968	92,000 sq. ft.			$10.9 million	City G.O. Bonds
		Expansion: 1977	130,000 sq. ft.			n/a	
		Expansion: 1987	240,000 sq. ft.			n/a	
		Expansion: 2000	480,000 sq. ft.			$175.0 million	City Hotel Tax Revenue Bonds (2% incr.) and facility revenues
Alamodome	San Antonio, TX	Opened: 1993	160,000 sq. ft.		65,000 seats	$186.3 million	Cash funded with 1/2 cent sales tax over five years

2. Financing Considerations

One of the tasks of this study was to examine the types of debt financing structures that can be utilized to finance facilities such as the combined convention center and sports stadium. In examining the components of this project and in discussions with members of the Commission, financing of this project has been divided into three types of financing: general obligation financing, appropriation financing backed by specific revenue streams and private financing. The philosophy behind the comprehensive financing structure is to have those portions of the project with purely public purposes to be supported by public financing sources and those portions of the project which are more private purpose in nature to be supported by private sources.

The first component required in the development of the project is the project infrastructure. These components include road and site improvements, utilities and on-site access to the convention center. These costs have been included as infrastructure costs and as such will be financed using G.O. bonds. These improvements are required to prepare the site for construction of the facility. Typically, infrastructure development is seen as public purpose projects and are therefore financed using G.O. bonds.

The Commonwealth is considering undertaking the development of the convention center because of the expectation that it will attract economic activity through the additional visitors that it will draw. Because of the incremental economic activity that will be generated (this activity was fully discussed in the MCCA/Price Waterhouse study), it is appropriate to view the development of this portion of the project as a public purpose project. Some public entities have chosen to use their G.O. capacity, i.e. their general taxing pledge, to finance these types of projects. However, the size of these projects relative to other needs may not make this approach the most desirable. In our discussions with the Commission, it has been determined that the most feasible approach would be to utilize an appropriation-backed type of financing for this portion of the project. An appropriation backed structure has the benefit of not using the Commonwealth's tax related debt capacity to finance this project. In an appropriation-backed structure, the Commonwealth pledges to make annual appropriations to pay debt service but *does not* pledge the state's taxing power. Therefore the investor takes the risk that the Commonwealth will not appropriate enough money in any year to pay debt service on the bonds. However, the investor understands that the likelihood of the state not appropriating enough funds in any year is remote. Because of this feature, the project will benefit from the state's participation without negatively impacting the state's credit rating. If structured correctly, the differential in interest rate above the Commonwealth's G.O. bonds would be approximately 10 basis points under normal market conditions and these bonds would carry a rating one level below the Commonwealth's general obligation bond rating.

For the convention center project, the most likely financing structure will be one in which the Commonwealth enters into a lease agreement with Massachusetts Convention Center Authority ("MCCA") and pledges to make lease payments for a period of 25 years. These lease payments will be subject to appropriation so that they will not be directly accounted for in the Commonwealth's debt capacity calculation. However, it must be noted that from a rating agency perspective, this debt service will be a continuing obligation of the Commonwealth and will be factored into the State's bond rating evaluation by the rating agencies. To minimize the impact of this additional debt obligation on the Commonwealth's credit rating, a specific stream of revenues could be identified as the source of revenue from which this debt service would be paid. In this

way the Commonwealth can dedicate a stream of revenues that can be evaluated by the rating agencies as to its sufficiency to meet debt service. In this way, the Commonwealth is able to demonstrate that the obligation is 'self supporting' and therefore should have little impact on the state's overall credit rating.

In analyzing the most appropriate type of debt structure to employ in support of the convention center portion of the project, it is important to recognize that the Commonwealth must continue to protect the credit quality of its bond rating which is directly translated into the level of interest rates that it must pay on all of its proposed bonds. The Commonwealth has one of the highest debt loads of all the states and the Legislative and the Executive branches are currently reviewing major new capital initiatives in the areas of higher education, prisons, seaport development, highway construction and information technology among others. Also, the level of federal funding for several capital improvements, such as highway construction, mass transit, and water and sewer projects may be reduced during the next several years. Consequently, it would be very difficult for the Commonwealth to commit to more than approximately $45 million per year in debt service of lease payments. In the financing scenarios which follow, it has been assumed that the Commonwealth's limitation for financing obligations of up to $45 million include both general obligation and appropriation-backed debt service. In all cases, the goal of the financing structures modeled in this analysis have attempted to minimize the amount of public debt required by seeking other forms of private financing.

As stated previously, the guiding philosophy in the development of this proposed project is to have those sectors who benefit from this development be responsible for funding their portion of the project. In the case of the stadium portion of the project, the Commission has decided that this portion of the project does not qualify as public purpose and therefore should not receive the benefit of public financing. For those portions of the project directly related to the stadium, it has been assumed that the debt will be private, taxable debt as opposed to the tax-exempt debt that will be used pay for the infrastructure and those costs related to the convention center facility itself. The private funding that will support the stadium development is expected to come from a number of sources. These sources are expected to include corporate equity contribution related to advertising and naming rights, annual contributions from lease payments from the Patriots, concession revenues, premium seating revenues and other corporate participation. The Commission is currently soliciting offers of corporate interest via the proposal process. It is anticipated that additional information regarding the exact nature of these commitments will be available in the near future. For the purposes of the financial analysis, it has been assumed that the minimum private revenue participation level will be $90 million on a capitalized basis, which is in addition to the Patriots' annual lease payment contribution. These revenues will be used to support any debt and operating costs associated with the stadium portion of the combined project.

To assist in the identification of the types of private revenues that are used to support football facilities, a pro forma cost and revenue statement for a similar facility has been developed. This pro forma statement identifies those sources and uses of revenues that are associated with a 'typical' football stadium facility. It is not intended to represent the financing structure proposed for this facility but rather to suggest potential financing and revenues sources which could be used in developing the proposed stadium component. This model, which represents one overview of the elements of stadium economics, is intended as a tool for understanding how these projects can be financed. The model is presented at the end of this section.

Massachusetts Megaplex Commission
Domed Football Stadium
Sample Pro Forma Operating Analysis

Facility Cash Flow	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Revenues:															
Event Revenue															
Ticket Rentals															
Football	2,111	2,195	2,283	2,375	2,470	2,568	2,671	2,778	2,889	3,005	3,125	3,250	3,380	3,515	3,655
Other Events	525	548	568	591	614	639	664	691	718	747	777	808	841	874	909
Concessions															
Football	1,593	1,657	1,724	1,792	1,864	1,939	2,018	2,097	2,181	2,268	2,359	2,453	2,551	2,653	2,759
Other Events	357	371	386	402	418	434	452	470	489	508	528	550	572	594	618
Novelties															
Football	69	72	75	78	81	84	88	91	95	99	103	107	111	116	120
Other Events	98	101	105	110	114	119	123	128	133	139	144	150	158	162	169
Parking															
Football	325	338	352	386	380	395	411	428	445	463	481	500	520	541	583
Other Events	228	237	246	256	268	277	288	299	311	324	337	350	364	379	394
Subtotal, Event Revenue	5,306	5,518	5,739	5,968	6,207	6,455	6,714	6,982	7,261	7,552	7,854	8,168	8,495	8,835	9,188
Premium Seating															
Suite Rentals	3,563	3,741	3,928	4,124	4,330	4,547	4,774	5,013	5,263	5,527	5,803	6,093	6,398	8,718	7,054
Club Seats	1,800	1,890	1,985	2,084	2,188	2,297	2,412	2,533	2,659	2,792	2,932	3,079	3,233	3,394	3,564
Subtotal, Premium Seating	5,363	5,631	5,912	6,208	6,518	6,844	7,186	7,546	7,923	8,319	8,735	9,172	9,630	10,112	10,617
Ancillary Revenue															
Stadium Advertising	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naming Rights	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stadium Club Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal, Ancillary Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Operating Revenue	10,668	11,149	11,651	12,176	12,725	13,299	13,900	14,528	15,184	15,871	16,589	17,340	18,125	18,946	19,805
Expenses:															
Salaries and Benefits	1,400	1,458	1,514	1,575	1,838	1,703	1,771	1,842	1,918	1,993	2,072	2,155	2,241	2,331	2,424
Equipment and Maintenance	1,000	1,040	1,082	1,125	1,170	1,217	1,265	1,316	1,369	1,423	1,480	1,539	1,601	1,665	1,732
Utilities	900	938	973	1,012	1,053	1,095	1,139	1,184	1,232	1,281	1,332	1,388	1,441	1,499	1,559
Cleaning	350	364	379	394	409	426	443	461	479	498	518	539	560	583	606
Contracted Services	325	338	352	368	380	395	411	428	445	463	481	500	520	541	583
Insurance	100	104	108	112	117	122	127	132	137	142	148	154	160	167	173
Total Operating Expense	4,075	4,238	4,408	4,584	4,767	4,958	5,156	5,362	5,577	5,800	6,032	6,273	8,524	6,785	7,057
Net Facility Operating Income	6,593	6,911	7,243	7,592	7,958	8,342	8,744	9,165	9,607	10,071	10,557	11,066	11,601	12,161	12,749

Massachusetts Megaplex Commission
Domed Football Stadium
Sample Pro Forma Operating Analysis
Facility Cash Flow

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Revenues:															
Event Revenue															
Ticket Rentals															
Football	3,802	3,954	4,112	4,276	4,447	4,625	4,810	5,003	5,203	5,411	5,627	5,853	6,087	6,330	8,583
Other Events	945	983	1,023	1,064	1,106	1,150	1,196	1,244	1,294	1,348	1,400	1,458	1,514	1,574	1,637
Concessions															
Football	2,870	2,985	3,104	3,228	3,357	3,492	3,631	3,776	3,927	4,085	4,248	4,418	4,595	4,776	4,970
Other Events	643	669	695	723	752	782	814	846	880	915	952	990	1,029	1,071	1,113
Novelties															
Football	125	130	135	141	146	152	158	184	171	178	185	192	200	208	218
Other Events	178	183	190	198	205	214	222	231	240	250	260	270	281	292	304
Parking															
Football	585	609	833	658	685	712	741	770	801	833	888	901	937	975	1,014
Other Events	410	426	443	461	479	498	518	539	581	583	806	631	858	882	709
Subtotal, Event Revenue	9,555	9,938	10,335	10,749	11,179	11,626	12,091	12,574	13,077	13,600	14,144	14,710	15,299	15,911	18,547
Premium Seating															
Suite Rentals	7,406	7,776	8,165	8,574	9,002	9,452	9,925	10,421	10,942	11,489	12,064	12,887	13,300	13,965	14,884
Club Seats	3,742	3,929	4,126	4,332	4,549	4,776	5,015	5,265	5,529	5,805	8,095	6,400	6,720	7,058	7,409
Subtotal, Premium Seating	11,148	11,706	12,291	12,905	13,551	14,228	14,940	15,687	16,471	17,295	18,159	19,067	20,021	21,022	22,073
Ancillary Revenue															
Stadium Advertising	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naming Rights	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stadium Club Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal, Ancillary Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Operating Revenue	20,704	21,643	22,628	23,654	24,729	25,854	27,030	28,281	29,548	30,895	32,304	33,777	35,319	36,932	38,820
Expenses:															
Salaries and Benefits	2,521	2,622	2,727	2,838	2,950	3,068	3,190	3,318	3,451	3,589	3,732	3,881	4,037	4,198	4,366
Equipment and Maintenance	1,801	1,873	1,948	2,026	2,107	2,191	2,279	2,370	2,465	2,563	2,666	2,772	2,883	2,999	3,119
Utilities	1,621	1,688	1,753	1,823	1,896	1,972	2,051	2,133	2,218	2,307	2,399	2,495	2,595	2,699	2,807
Cleaning	630	856	882	709	737	767	798	829	863	897	933	970	1,009	1,050	1,092
Contracted Services	585	609	833	658	885	712	741	770	801	833	866	901	937	975	1,014
Insurance	180	187	195	203	211	219	228	237	248	258	267	277	288	300	312
Total Operating Expense	7,339	7,632	7,938	8,255	8,585	8,929	9,286	9,657	10,044	10,445	10,863	11,298	11,750	12,220	12,709
Net Facility Operating Income	13,365	14,011	14,688	15,399	16,144	16,925	17,744	18,604	19,505	20,450	21,440	22,480	23,570	24,713	25,911

Massachusetts Megaplex Commission
Domed Football Stadium
Sample Pro Forma Operating Analysis
Event Parameter Assumptions: Attendance

Events	Per Game Attendance	Number of Events	Annual Attendance	Gross Ticket Price*	Admissions Tax (10.00%)	Net Ticket Price	Net Ticket Revenue	Percentage to Facility	Rent Payable to Facility
NFL - PreSeason									
General Seating - Upper Deck	13,610	2	27,620	$35.00	$0.00	$35.00	966,700	10.00%	96,670
General Seating - Lower Deck	28,050		56,100	$40.00	$0.00	$40.00	2,244,000	10.00%	224,400
Club Seating	4,500		9,000	$40.00	$0.00	$40.00	360,000	10.00%	36,000
Suite Seating	1,140		2,280	$40.00	$0.00	$40.00	91,200	10.00%	9,120
Subtotals, PreSeason	47,500		95,000				3,661,900		366,190
NFL - Regular Season									
General Seating - Upper Deck	23,610	6	190,460	$35.00	$0.00	$35.00	6,666,600	10.00%	666,680
General Seating - Lower Deck	26,050		224,400	$40.00	$0.00	$40.00	8,976,000	10.00%	697,600
Club Seating	4,500		36,000	$40.00	$0.00	$40.00	1,440,000	10.00%	144,000
Suite Seating	1,140		9,120	$40.00	$0.00	$40.00	364,800	10.00%	36,480
Subtotals, Regular Season	57,500		460,000				17,447,600		1,744,760
Subtotals, Football		10	555,000				21,109,500		2,110,950
Other Stadium Events									
Concerts	50,000	3	150,000	$33.00	$0.00	$33.00	4,950,000	10.00%	495,000
Other Sporting Events	15,000	4	60,000	$5.00	$0.00	$5.00	300,000	10.00%	30,000
Subtotals, Other Events		7					5,250,000		525,000
Totals		17					26,359,500		2,635,950

* 1994 average ticket price of $34.34.

Massachusetts Megaplex Commission
Domed Football Stadium
Sample Pro Forma Operating Analysis
Event Parameter Assumptions: Concessions and Novelties

Events	Concessions Per Capita	Percent to Facility	Concessions to Facility	Novelties per Capita	Percent to Facility	Novelties to Facility
NFL - PreSeason						
General Seating - Upper Deck	$7.00	40.00%	77,336	$1.25	10.00%	3,453
General Seating - Lower Deck	$7.00	40.00%	157,080	$1.25	10.00%	7,013
Club Seating	$20.00	17.50%	31,500	$1.25	10.00%	1,125
Suite Seating	$20.00	17.50%	7,980	$1.25	10.00%	285
Subtotals, PreSeason			273,896			11,875
NFL - Regular Season						
General Seating - Upper Deck	$7.00	40.00%	533,344	$1.25	10.00%	23,810
General Seating - Lower Deck	$7.00	40.00%	628,320	$1.25	10.00%	28,050
Club Seating	$20.00	17.50%	126,000	$1.25	10.00%	4,500
Suite Seating	$20.00	17.50%	31,920	$1.25	10.00%	1,140
Subtotals, Regular Season			1,319,584			57,500
Subtotals, Football			1,593,480			69,375
Other Stadium Events						
Concerts	$5.25	40.00%	315,000	$6.50	10.00%	97,500
Other Sporting Events	$1.75	40.00%	42,000	$0.00	10.00%	0
Subtotals, Other Events			357,000			97,500
Totals			1,950,480			166,875

Massachusetts Megaplex Commission
Domed Football Stadium
Sample Pro Forma Operating Analysis
Additional Assumptions

Stadium Capacity	70,000
Rates	
Inflation	4.00%
Admissions Tax	0.00%
Premium Seating Premiums*	
Luxury Suites	
Number of Suites	100
Percent Licensed	95.00%
Number Licensed	95
Number of Seats per Suite	12
Average Suite Premium	$75,000
Annual Average Premium Increase	5.00%
Percent to Facility	50.00%
Club Seats	
Number of Club Seats	5,000
Percent Licenced	90.00%
Number Licensed	4,500
Average Club Seat Premium	$800
Annual Average Premium Increase	5.00%
Percent to Facility	50.00%
Parking	
Number of Spaces Available	5,000
Net Price per Space	$6.50
Persons per Vehicle - NFL Events	3.2
Persons per Vehicle - Other Events	3.0
Percent to Facility - NFL Events	100.00%
Percent to Facility - Other Events	100.00%
Other Facility Revenues	
Stadium Advertising	$2,500,000
Percent to Facility	0.00%
Naming Rights	$500,000
Percent to Facility	0.00%
Stadium Club	$50,000
Percent to Facility	0.00%

* Does not include tickets to events.

3. Facility Cost Assumptions

Public Financial Management as financial advisor to the Commission has prepared this portion of our report and its accompanying attachments to be presented to the Commission in response to the Commission's questions regarding the financing of the proposed convention center and sports stadium or megaplex facility. This portion of the report includes an analysis of annual costs associated with the construction and operation of the facility. The identification of potential revenue sources to support the facility is contained in the following section.

Price Waterhouse ("PW") in its report to the Massachusetts Convention Center Authority ("MCCA"), prepared cost estimates for the construction of a number of facilities with differing design options. Upon careful consideration, the Commission has selected a 650,000 square foot combined convention center and stadium facility. The costs of this convention center/stadium complex are listed below:

	650,000 SF Convention Center/ Stadium Complex
Site Acquisition	$ 76,650,000
Infrastructure	162,250,000
Convention Center and Stadium	547,410,000
Red Sox Stadium	150,000,000
Legal/Permitting/Professional Fees	6,750,000
Total Project Costs	**$ 943,060,000**

Site acquisition costs include the costs of land acquisition, taking and relocation costs. Infrastructure costs include the foundation, 3,000 parking spaces located within the convention center facility and on site utilities. Legal/permitting/professional fees include fees related to environmental permitting and sitting issues. The convention center/stadium costs include hard construction costs, construction contingency and soft costs at a level of 30% of hard construction costs. The cost of the Red Sox baseball park has been developed by the Red Sox organization and is not part of the PW report. This facility will be privately financed by the Red Sox with the exception of certain site acquisition and infrastructure costs of approximately $30 million which will be funded by Commonwealth G.O. Bonds.

There are a number of costs which are not included in the total project costs including operating costs, replacement reserves and marketing costs. In addition, some capital costs, such as furniture, fixtures and equipment ("FFE"), a stand alone parking structure, off site costs for access and transit and acquisition of surrounding acreage are not included.

4. Financing Assumptions

Our analysis incorporates two different categories of bonds which are secured by two different payment streams. We have assumed that the Commonwealth would issue general obligation bonds ("G.O. Bonds") to fund certain costs of the facility including site acquisition and associated project infrastructure. The G.O. Bonds are structured in the same manner as all other general obligation bonds of the Commonwealth. For the financing of the facility, we have assumed that the MCCA would issue Lease Revenue Bonds or Certificates of Participation which are secured by an annual appropriation from the Commonwealth. It is anticipated that the Commonwealth's annual appropriations are funded by dedicating existing or new revenue streams to the project. The sources of these revenues will be discussed later in this report.

We have calculated debt service on the bonds at two different sets of interest rates: a current market condition case and a more conservative case. Current market conditions are 6.00%. but to be conservative, the numbers presented in this report assume a 100 basis point increase from current market rates, i.e. 7.00% for the G. O. Bonds. Potential investors in this project would likely demand a premium for bonds, like the MCCA's Lease Revenue Bonds, which have a weaker security feature than a general obligation pledge due to the appropriation feature. Current market conditions place this premium at 0.10%; therefore the Lease Revenue Bonds or COPs have been assumed to have an interest rate of 7.10%. Additionally, investors require that bonds backed by annual appropriations be secured by a debt service reserve fund, which is equal to the maximum annual debt service on the bonds. This fund is segregated and placed with a trustee. While the principal is only available to makeup delinquent or insufficient debt service payments, the earnings from the reserve fund can be applied to pay a portion of debt service annually. Our analysis assumes that the reserve fund earns interest at a rate equal to the bond rate. The term of the bonds is assumed to be 25 years.[1]

Facility Debt Service

650,000 Square Foot Convention Center and Stadium

An analysis of the construction of this facility are contained at the end of this section. Total bonds issued for the combined convention center and sports facility complex based on the financing assumptions outlined above would be approximately $812.4 million. The construction of the combined facility is phased in over a period five years to minimize the size of the debt issuance in any one year. All of the site acquisition and infrastructure financing associated with the construction of the convention center, stadium and Red Sox facility portion of the project, is completed in 1997 with the convention center facility is operational in FY 1999. At the tail end of construction of the convention center, the construction of the stadium portion begins so that the entire facility is operational by FY 2001. The financing for both the convention center and stadium are completed through the issuance of Lease Revenue Bonds or Certificates of Participation. The convention center portion has interest capitalized until the start of operation in FY 1999, and the stadium has interest capitalized to the start of operation in FY 2001. Total net annual debt service for the combined facility is estimated at $75.37 million for a 25-year amortization which includes debt service for renovation projects in Worcester, Springfield and the

[1] Rebate restrictions in the Internal Revenue Code require tax-exempt issuers to rebate to the federal government all earnings on bond proceeds in excess of the bond rate, with certain exemptions for which the debt service reserve fund does not qualify.

proposed Regional Facilities Fund. Debt service on all the facilities for a 20-year amortization would be $83.34 million and debt service for the total program on a 30-year basis would be $70.57 million.

Annual operating costs are estimated to be about 5% of the hard construction costs of the convention center portion and 7% of the hard costs of the stadium portion which together are approximately $30.1 million. Replacement reserves, estimated to be 3% of operating costs, are approximately $900,000. FFE is estimated to be 7% for the convention center portion and 12% for the stadium portion, which together are approximately $41.3 million.[2] Promotional and marketing costs are estimated to be an additional $3 million.

Stand Alone Parking Structure

The PW report estimated that a 12,000 space stand alone parking structure would be required to service the stadium and would cost about $15,000 per space or $180 million in hard construction costs. Price Waterhouse estimates additional soft costs total 15% of the hard construction costs. Total costs for the structure are estimated to be $207 million. There are several financing structures available for the parking garage. The garage could be financed through the issuance of Lease Revenue Bonds by the MCCA or another state agency like Massport, in which case we would estimate the debt service of to be $20.11 million over twenty-five years. The parking garage could be also designed, constructed and operated by a private third party which could then contract to provide a payment stream to be used to pay for a portion of the convention center/stadium facility.

Other Considerations

Design and Construction Bid Process

There are a number of different strategies and processes available to design and build any of the proposed facilities. Several facilities around the country have been completed using a design/build contract structure which allows the facility to be completed more efficiently and therefore reduce costs. Using a design/build process, the design and construction of the facility is undertaken by a single team who manages the entire process from design through construction for a fixed fee. One of the major benefits of this process is that it can minimize construction schedule length by exempting the contractor from the full public bidding process. There are certain legal limits considerations in the Commonwealth including the Ward Commission issues, to pursuing this type of structure, but there are also several modified versions of this process which might be utilized.

One such example would be to develop certain minimum design requirements to such detail as is determined to be required by the MCCA to ensure the class of facility desired. These minimum requirements are provided to contractors who then design a facility to these detailed specifications on which they bid their fixed fee construction costs. In some projects this process has included requiring the proposing contractors to build scale models in addition to architectural plans and renderings of their designed facility so that the evaluators of each of the proposals can determine whether or not the design meets the minimum requirements.

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[2] Assumes that $280 million cost of stadium includes soft costs and construction contingency equal to 25% of hard construction costs.

One of the major benefits of a design build structure is that will allows the Commonwealth to utilize a revenue type bond structure to finance the facility. This structure, unlike a G.O. structure, will allow the debt service of the facility to be deferred until the project is completed in FY 1999. This enables the Commonwealth to minimize the repayment of its obligation in the early years of the project, before it begins to generate revenue and at a time when the Commonwealth has other significant debt service requirements.

Timing of Bond Sales

The assumptions for this project assume that annual capital needs are funded in one-year increments. This method minimizes the amount of capitalized interest, and therefore minimizes the size of the borrowing. This method of financing does create some interest rate risk for the Commonwealth in that rates may vary dramatically from one year to the next. To the extent that the Commonwealth wishes to lock-in a cost of capital, it may desire to borrow as much as possible in what it considers a low interest rate environment.

Length of Amortization

The analysis assumes a twenty-five year amortization of both the G.O. and Lease Revenue Bonds. It is possible to substitute some or all of the issues with either a 20 or 30 year amortization as determined to be appropriate by the Executive Office of Administration and Finance Moving to a 30 year amortization has the effect of increasing total gross debt service payable over the life of the bond issue, but reduces the amount payable in any year. Lengthening the amortization period may also raise questions about the useful life of the facility and the need to renovate the facility on a periodic basis to maintain it marketability.

This portion of the report is not meant to be a comprehensive analysis of all the different structuring options available to the Commonwealth for the construction of the proposed combined facility. It is meant to provide the framework to discuss the capital costs of the elements of the proposed facility. There are many other factors which could influence the annual debt service associated with the combined facility including but not limited to, location of the facility, final design and the infrastructure needs both on and off site.

Massachusetts Megaplex Commission
Cost Assumptions

	650,000 SF Convention Center/ Stadium Complex
Site Acquisition	$ 76,650,000
Infrastructure	162,250,000
Convention Center and Stadium	547,410,000
Red Sox Stadium	150,000,000
Legal/permitting/ professional fees	6,750,000
Total Project Costs	**$ 943,060,000**

Site Acquisition includes: Land Acquisition, Taking and Relocation Costs.

Infrastructure includes: Foundation, Utilities on-site and 3,000 parking spaces

Convention Center and Stadium costs include hard construction costs plus contingency and soft costs which include A/E design and EIS work.

Red Sox Stadium construction costs provided by Red Sox.

Legal/Permitting/Professional Fees includes: Fees relating to environmental permitting and siting issues.

Costs not included in Project Cost:

- Operational costs of Convention Center and Stadium (Estimated to be 5-7% of hard construction costs)
- Replacement Reserve (Estimated at 3% of operational costs)
- Costs of Massachusetts Convention Visitors' Bureau marketing program.
- Furniture, Fixtures and Equipment (Estimated to be 7-12% of hard construction costs)
- Stand Alone Parking Structure
- Off site costs for access and transit and acquisition of surrounding acreage at approximately $1.3 million per acre.

Massachusetts Megaplex Commission
Annual Debt Service Requirements

650,000 Sq. Ft. Convention Center/Stadium Complex
Current Market Rates plus 100bp (7.00% General Obligation; 7.10% Lease Revenue Bonds; 25-Year Amortization)

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Facility Debt Service						
Site Acquisition	$ 0	$ 4,027,000	$ 6,712,000	$ 6,712,000	$ 6,712,000	$ 6,712,000
Infrastructure	0	7,399,000	14,798,000	14,798,000	14,798,000	14,798,000
Convention Center & Stadium	0	9,923,000	19,067,000	35,486,000	41,983,000	48,640,000
Total Facility Gross Debt Service	**0**	**21,349,000**	**40,577,000**	**56,996,000**	**63,493,000**	**70,150,000**
Less Capitalized Interest	0	(9,064,000)	(17,416,000)	(6,440,000)	(12,374,000)	0
Less DSRF Earnings	0	(859,000)	(1,651,000)	(2,629,000)	(3,192,000)	(3,453,000)
Total Facility Net Debt Service	**0**	**11,426,000**	**21,510,000**	**47,927,000**	**47,927,000**	**66,697,000**
Other Debt Service (1)	**0**	**8,669,000**	**8,669,000**	**8,669,000**	**8,669,000**	**8,669,000**
Total Program Debt Service	**$ 0**	**$ 20,095,000**	**$ 30,179,000**	**$ 56,596,000**	**$ 56,596,000**	**$ 75,366,000**

(1) Includes debt service for other projects including Worcester ($17m), Springfield ($32m) and the proposed Facilities Fund ($50m).

Massachusetts Megaplex Commission
Timing of Project Costs
650,000 SF Convention Center/Stadium Complex
Current Market Rates plus 100bp (7.00% General Obligation; 7.10% Lease Revenue Bonds)

	Date	Amortization Term	Interest Rate	Term of Cap Interest	Project Costs (1)	Debt Service Reserve Fund	Costs of Issuance	Net Capitalized Interest	Total Bonded Costs
Site Acquisition									
Issue #1	Jun-01-96	25 years	7.000%	0 years	45,990,000	0	939,000	0	46,929,000
Issue #2	Jun-01-97	25 years	7.000%	0 years	30,660,000	0	626,000	0	31,286,000
Subtotal					76,650,000	0	1,565,000	0	78,215,000
Convention Center and Stadium (2)									
Issue #1	Jun-01-96	25 years	7.100%	2 years	106,964,000	12,101,000	2,795,000	17,895,000	139,755,000
Issue #2	Jun-01-97	25 years	7.100%	1 years	106,964,000	11,152,000	2,576,000	8,101,000	128,793,000
Issue #3	Jun-01-98	25 years	7.100%	Mix (3)	129,482,000	13,781,000	3,183,000	12,714,000	159,160,000
Issue #4	Jun-01-99	25 years	7.100%	1 years	76,000,000	7,923,000	1,830,000	5,756,000	91,509,000
Issue #5	Jun-01-00	25 years	7.100%	0 years	38,000,000	3,683,000	851,000	0	42,534,000
Subtotal					457,410,000	48,640,000	11,235,000	44,466,000	561,751,000
Infrastructure and Legal/Permitting/Professional Fees									
Issue #1	Jun-01-96	25 years	7.000%	0 years	84,500,000	0	1,724,000	0	86,224,000
Issue #2	Jun-01-97	25 years	7.000%	0 years	84,500,000	0	1,724,000	0	86,224,000
Issue #3	Jun-01-98	25 years	7.000%	0 years	0	0	0	0	0
Subtotal					169,000,000	0	3,448,000	0	172,448,000
TOTAL ALL PROJECT COSTS					703,060,000	48,640,000	16,248,000	44,466,000	812,414,000
					236,069,650				

(1) Costs for each portion of the project are financed in phases over multiple years. Site acquisition has 60%-40% split; Infrastructure has a 50%-50% split; Convention Center and Stadium has a 40%-40%-20% split.
(2) Convention Center and Stadium costs are reduce by $90,000,000 representing corporate sponsorship.
(3) Phased development of facility leads to different opening dates for components. Interest is capitalized until the opening of the facility.

Prepared by Public Financial Management, Inc. 5/31/95

Massachusetts Megaplex Commission
Annual Capital Borrowing

650,000 SF Convention Center and Stadium
Current Market Rates plus 100bp (7.00% General Obligation; 7.10% Lease Revenue Bonds; 25-Year Amortization)

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	Total
Total Site Acquisition	$ 46,929,000	$ 31,286,000	$ 0	$ 0	$ 0	$ 78,215,000
Total Infrastrcuture	86,224,000	86,224,000	0	0	0	172,448,000
Total Convention Center and Stadium	139,755,000	128,793,000	159,160,000	91,509,000	42,534,000	561,751,000
Total Bonds Issued	$ 272,908,000	$ 246,303,000	$ 159,160,000	$ 91,509,000	$ 42,534,000	$ 812,414,000
General Obligation	$ 133,153,000	$ 117,510,000	$ 0	$ 0	$ 0	$ 250,663,000
Lease Revenue	139,755,000	128,793,000	159,160,000	91,509,000	42,534,000	561,751,000
Total Bonds Issued	$ 272,908,000	$ 246,303,000	$ 159,160,000	$ 91,509,000	$ 42,534,000	$ 812,414,000

Prepared by Public Financial Management, Inc. 5/31/95

Massachusetts Megaplex Commission
Annual Debt Service Requirements

650,000 Sq. Ft. Convention Center/Stadium Complex
Current Market Rates plus 100bp (7.00% General Obligation; 7.10% Lease Revenue Bonds; 30-Year Amortization)

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Facility Debt Service						
Site Acquisition	$ 0	$ 3,782,000	$ 6,303,000	$ 6,303,000	$ 6,303,000	$ 6,303,000
Infrastructure	0	6,948,000	13,896,000	13,896,000	13,896,000	13,896,000
Convention Center & Stadium	0	9,861,000	18,952,000	33,579,000	40,039,000	45,453,000
Total Facility Gross Debt Service	**0**	**20,591,000**	**39,151,000**	**53,778,000**	**60,238,000**	**65,652,000**
Less Capitalized Interest	0	(9,058,000)	(17,409,000)	(6,436,000)	(12,370,000)	0
Less DSRF Earnings	0	(803,000)	(1,543,000)	(2,457,000)	(2,983,000)	(3,227,000)
Total Facility Net Debt Service	**0**	**10,730,000**	**20,199,000**	**44,885,000**	**44,885,000**	**62,425,000**
Other Debt Service (1)	**0**	**8,141,000**	**8,141,000**	**8,141,000**	**8,141,000**	**8,141,000**
Total Program Debt Service	**$ 0**	**$ 18,871,000**	**$ 28,340,000**	**$ 53,026,000**	**$ 53,026,000**	**$ 70,566,000**

(1) Includes debt service for other projects including Worcester ($17m), Springfield ($32m) and the proposed Facilities Fund ($50m).

Massachusetts Megaplex Commission
Annual Debt Service Requirements

650,000 Sq. Ft. Convention Center/Stadium Complex
Current Market Rates plus 100bp (7.00% General Obligation; 7.10% Lease Revenue Bonds; 20-Year Amortization)

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Facility Debt Service						
Site Acquisition	$ 0	$ 4,430,000	$ 7,383,000	$ 7,383,000	$ 7,383,000	$ 7,383,000
Infrastructure	0	8,139,000	16,278,000	16,278,000	16,278,000	16,278,000
Convention Center & Stadium	0	10,026,000	19,258,000	38,678,000	45,238,000	53,973,000
Total Facility Gross Debt Service	**0**	**22,595,000**	**42,919,000**	**62,339,000**	**68,899,000**	**77,634,000**
Less Capitalized Interest	0	(9,072,000)	(17,426,000)	(6,446,000)	(12,382,000)	0
Less DSRF Earnings	0	(954,000)	(1,832,000)	(2,918,000)	(3,542,000)	(3,832,000)
Total Facility Net Debt Service	**0**	**12,569,000**	**23,661,000**	**52,975,000**	**52,975,000**	**73,802,000**
Other Debt Service (1)	**0**	**9,536,000**	**9,536,000**	**9,536,000**	**9,536,000**	**9,536,000**
Total Program Debt Service	**$ 0**	**$ 22,105,000**	**$ 33,197,000**	**$ 62,511,000**	**$ 62,511,000**	**$ 83,338,000**

(1) Includes debt service for other projects including Worcester ($17m), Springfield ($32m) and the proposed Facilities Fund ($50m).

Prepared by Public Financial Management, Inc. 5/31/95

5. Revenue Sources

Perhaps the most important element of this study beside the determination of the cost of the facility and the financing structure that could be employed is to determine the range of revenues that are available to pay for the combined convention center and stadium facility. As has been discussed previously, the Commission's philosophy in developing this project is to have those sectors of the economy who will benefit from its development, shoulder the burden for paying both its debt service and annual operating costs. A number of different revenue streams were examined as potential sources of revenue to support the debt associated with the development of the facility. It is anticipated that the final sources of revenues that are selected will be dedicated to pay debt service on the facility bonds.

In our examination of revenue sources to pay debt service on the convention center portion of the facility bonds, we examined a broad range of revenue sources including the dedication of existing taxes and the development of new taxes and fees options. The full range of options examined are contained in Table 1. The range of revenue raising options is broad so as to spread the responsibility of paying for the facility over the broadest base of those users who will benefit from economic impact. It should also be noted that whenever practicable, where sectors of the economy did not share equally in the potential benefits due to geographical consideration, the fee structure proposed was modified to reflect this disparity. The following section outlines the components of the proposed revenue option plan for the combined convention center/stadium facility. Table 2 presents the sources and amount of potential revenues which are forecasted from the proposed revenue plan.

Commonwealth Contribution

As was discussed previously, there are elements of this project which are essentially public purpose in nature. i.e. the infrastructure required to prepare the site for development. It has been assumed that this portion of the project will be funded by general obligation bonds. The Commonwealth has indicated that it can support up to approximately $45 million in debt service annually to support this project. Because of other capital financing projects that will require Commonwealth assistance to pay debt service, it would not be prudent to include an amount in excess of $45 million from this source. The rating agencies will continue to monitor growth in debt and revenue sources available to the Commonwealth to service their existing and planned debt with a sensitivity to any imbalance occurring. Therefore to protect the credit quality of the Commonwealth's bond rating, the amount of the Commonwealth contribution will be kept as low as is practicable.

Private Sources

Hotel/Motel Room Fee

There is currently a hotel/motel tax of 5.7% which applies statewide to room rates. In addition there is a local option portion of the tax which Boston has chosen to apply of 4%. Rather than increasing the existing tax, the revenue source proposed is a per night fee that would be imposed on all rooms throughout the Commonwealth. This fee has been proposed because it would apply to those most likely to utilize the convention center facilities. The use of hotel/motel fees is the most widely used revenue source used for new convention center facilities. In order to

equitably distribute the cost of the convention center facility to those who will benefit the most, the fee will range from .75 per night from Route 495 west, $1.25 per night from Route 128 west to Route 495, and $1.75 per night for hotels located within Route 128. The income derived from this fee would also support the renovation of the Worcester and Springfield facilities for approximately $17 million and $32 million, respectively. To provide additional revenue to support the financing of these two facilities it is anticipated that the hotel fee of $1.75 would also apply to hotel rooms in Worcester and Springfield and those rooms located in communities contiguous to both cities.

The purpose of the hotel/motel per night fee is to support the debt service of the facility and therefore it is proposed that this fee would have a sunset provision which would apply once the bonds were retired. The addition the implementation of the per night fee would not interfere with the City of Boston's ability to raise its local option hotel/motel tax if it chose to do so as a way of generating revenue to support the proposed facility.

Whereas 35% of the current hotel/motel tax is used to pay travel and tourism promotion including payment to MCCA for the Hynes convention facility and regional tourism efforts, we would propose that a portion of the fees collected under this program be utilized to fund a statewide facilities fund. A portion of the fee income would be directed towards the statewide facility fund and an integrated statewide marketing program and a portion of operating costs of the proposed facility. This facilities fund would be used to pay for theater, arena and stadium renovation and construction projects that may be required for smaller facilities across the state. This fund would operate as a revolving fund which would reloan money as loans are paid back. We have estimated that the initial size would be approximately $50 million which would require annual contributions of $4.5 million to support the debt service on the fund. The statewide facilities fund would be an equitable way in which all contributors to the hotel/motel per night fee could share in the benefits of the revenue stream.

In order to create support for the additional per night hotel fee among the hotel and hospitality industry, it has also been proposed that the membership of the MCCA be expanded to include members from across the state to balance contributions for the facility collected statewide. The industry has expressed interest in including representation of one hotel representative from the Boston area , one hospitality representative from outside the Boston area. In this way, the new convention facility will be developed with the needs of the hotel and hospitality industry statewide considered. Based on current hotel and motel occupancy levels and assuming that no new rooms are added, the amount that would be generated from this fee is projected to be approximately $23.4 million annually.

Rental Car Contract Fee

A second revenue stream that is proposed is a rental car contract fee per rental of $2.50 which includes the current $.30 fee. This fee is applied to every transaction where a contract is generated for a car rental. (It would not apply to cars that are leased.) This fee would most likely be paid by visitors to the Boston area in that the majority of car rental transactions take place within the Route 128 region. It is assumed that a portion of those assessed this fee may also be potential users of the facility. Assuming current levels of car rentals, it is estimated that the amount that would be generated on an annual basis by the incremental amount would be approximately $11 million.

Cruises Trolley and Tour Buses

A ticket surcharge of $1 per ticket on sightseeing cruises, $.50 per ticket on trolley tours and a 5% surcharge on bus sightseeing tours has also been considered. This activity is primarily undertaken by visitors to the area with the majority of this activity taking place within the greater Boston area. An exemption has been proposed for school groups who utilize these services as they would not be users of the facility but may be likely patrons of the tours. Assuming current levels of tours taken (as identified by hotel operators in the region) of approximately 300,000 for cruises and 700,000 for trolleys and for tour buses, the ticket surcharge could amount to approximately $1 million annually.

Facility Ticket Surcharge

Another source of revenue that has been examined is a ticket surcharge that would apply to both Patriots and Red Sox tickets and any other activities occurring at the stadium such as concerts or any other special events. The proposed surcharge would be 10% of the ticket price or an average of approximately $3 per ticket. The surcharge would apply only to those tickets over $10 which would exempt approximately 7,000 of the lowest price bleacher seats which are the lowest cost seats in the proposed Red Sox stadium. It is estimated that the potential revenue stream from this source would average approximately $5.9 million annually for sports related events and an additional $1.5 million for other events which would take place in the stadium facility.

Stadium Parking Surcharge

Another potential revenue source that has been considered is a surcharge on parking associated with the stadium facility. This fee is proposed to be $1 per day which would apply to any game day or event day. In addition, it is assumed that this surcharge would apply to the use of the 12,000 spaces by other activities including its use as supplementary parking to downtown or in support of other activities associated with the convention center and waterfront. Based on these estimates, it is assumed that approximately $2.5 million could be collected annually from this source.

Patriots Lease Payments

An additional private source of revenue for the stadium facility would be the stream of annual lease payments that would be made by the New England Patriots. These lease payments would be applied directly to the debt service associated with the incremental cost of building the domed stadium facility. Currently the Patriots are proposing to make $5 million in annual lease payments for the facility over a period of 25 years.

Corporate Contributions

The other stream of private revenues that may be available to be pledged to meet the debt service on the stadium portion of the project is those revenues that will be pledged from corporate sponsors. These pledges may take the form of naming rights and other advertising revenues as well as other forms of participation.. While the specific structure of these contributions is not known, it is anticipated that contribution will be capitalized and used to reduce the total amount of the facility to be financed. The Commission is currently soliciting expressions of interest from

potential corporate participants for values in excess of $90 million. For this study the amount of private corporate contributions has been assumed to be approximately $90 million which will be applied to reduce the financing cost of the facility.

Annual Operating Costs

Annual costs of approximately $30.1 million could be paid from a number of sources including revenues generated from operating the facility, concession revenues, and the growth of other revenue sources generated by additional hotel activity associated with the facility. It is currently estimated that 3,000 hotel rooms will have to be built in Boston and the surrounding suburban area to meet the demand of visitors generated by the convention center. Currently, 35% of the existing hotel/motel tax is earmarked to support travel and tourism within the Commonwealth, including MCCA and regional tourism boards. With the growth of the hotel room base, this amount which is currently $68 million will continue to grow without additional taxes through expansion and the average growth rate of 3% per year. This growth will supplement the operating revenues from the facility which is expected to cover approximately 50% of the operating cost. These operating costs include the funding of a replacement reserve and statewide promotional marketing program. There will be a one time cost of approximately $41 million associated with furniture, fixtures and equipment for the convention center/fixed seating facility. A substantial portion of this will be financed through negotiations with food service vendors. It is also anticipated that the revenues generated annually by the facility concessions will be used to meet any operating cost deficit.

Massachusetts Megaplex Commission
Revenue Source Options

Table 1

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
1% of 5.7% Existing Hotal/Motel Tax (1)	$ 11,754,000	$ 11,754,000	$ 11,754,000	$ 11,754,000	$ 11,754,000	$ 11,754,000
Dedicated 1% of 5.7% Existing Hotal/Motal Tax (1)	$ 11,754,000	$ 11,754,000	$ 11,754,000	$ 11,754,000	$ 11,754,000	$ 11,754,000
Dedicetad 0.6% Incraase in Hotel/Motel Tax (1)	7,053,000	7,053,000	7,053,000	7,053,000	7,053,000	7,053,000
Dedicated 0.7% Incraase in Hotal/Motel Tax (1)	0	0	8,228,000	8,228,000	8,228,000	8,228,000
Total	$ 18,807,000	$ 18,807,000	$ 27,035,000	$ 27,035,000	$ 27,035,000	$ 27,035,000
Dedicated 2% of 5.7% Existing Hotel/Motel Tax (1)	$ 23,509,000	$ 23,509,000	$ 23,509,000	$ 23,509,000	$ 23,509,000	$ 23,509,000
$1 Per Night Fee on Hotel Rooms (Inside 128) (2)	$ 7,100,000	$ 7,100,000	$ 7,100,000	$ 7,100,000	$ 7,100,000	$ 7,100,000
$1 Per Night Fee on Hotel Rooms (Inside 495) (2)	$ 13,000,000	$ 13,000,000	$ 13,000,000	$ 13,000,000	$ 13,000,000	$ 13,000,000
$1 Par Night Fee on Hotel Rooms (Statewide) (2)	$ 17,800,000	$ 17,800,000	$ 17,800,000	$ 17,800,000	$ 17,800,000	$ 17,800,000
$0.75 Per Night on Hotel Rooms (Outside of 495) (2)	$ 3,600,000	$ 3,600,000	$ 3,600,000	$ 3,600,000	$ 3,600,000	$ 3,600,000
$1.25 Per Night on Hotel Rooms (Between 495 and 128) (2)	7,375,000	7,375,000	7,375,000	7,375,000	7,375,000	7,375,000
$1.75 Par Night on Hotal Rooms (Inside 128) (2)	12,425,000	12,425,000	12,425,000	12,425,000	12,425,000	12,425,000
Total	$ 23,400,000	$ 23,400,000	$ 23,400,000	$ 23,400,000	$ 23,400,000	$ 23,400,000
1% Incraase in Meels Tax (Inside 128)	$ 26,000,000	$ 26,000,000	$ 26,000,000	$ 26,000,000	$ 26,000,000	$ 26,000,000
1% Incraase in Meals Tax (Inside 495)	$ 51,000,000	$ 51,000,000	$ 51,000,000	$ 51,000,000	$ 51,000,000	$ 51,000,000
1% Increase in Maals Tax (Statewide)	$ 72,000,000	$ 72,000,000	$ 72,000,000	$ 72,000,000	$ 72,000,000	$ 72,000,000
$0.025 per gallon Jat Fuals Fee	$ 6,250,000	$ 6,250,000	$ 6,250,000	$ 6,250,000	$ 6,250,000	$ 6,250,000
3% Salas Tax on Cer Rentals (Inside 128)	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000
3% Salas Tax on Car Rentals (Inside 495)	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000
3% Salas Tax on Cer Rentals (Statewide)	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000
$2.50 Contract Fae on Car Rentals	$ 11,000,000	$ 11,000,000	$ 11,000,000	$ 11,000,000	$ 11,000,000	$ 11,000,000
Trolleys, Cruisas end Tour Buses Fees	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
10% Ticket Surcharge on Red Sox (3)	$ 4,299,000	$ 4,299,000	$ 4,299,000	$ 4,299,000	$ 4,299,000	$ 4,299,000
10% Tickat Surcharge on Petriots (3)	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000
Total	$ 5,949,000	$ 5,949,000	$ 5,949,000	$ 5,949,000	$ 5,949,000	$ 5,949,000
Othar Evants Ticket Surchherge	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
$1 Stadium Parking Surcharge (4)	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000

(1) Assumas current hotal market conditions, including numbar of rooms, prices end occupancy ratas.
(2) Assumas 65% occupancy rate.
(3) Assumas annual Red Sox attandance of 2,000,000. Blaachar seats (567,000 per yaar) would not be subject to surcharge. Assumes annual Petriots attandance of 550,000.
(4) Assumas 10,000 spaces and 250 days.

Prepared by Public Financial Management, Inc. 5/31/95

Table 2

Chapter 6, Acts of 1995 Commission
Proposed Debt Service Revenue Plan

Convention/Sports Complex Project Cost	**$943.06 million**
Corporate Equity Contribution	**$ 90 million**
Red Sox Contribution	**$150 million**
Total Convention/Sports Complex Cost financed	**$703.06 million**
Springfield Facility	**$ 32 million**
Worcester Facility	**$ 17 million**
Regional Facilities Fund	**$ 50 million**
Total Program Costs to be financed	**$802.06 million**

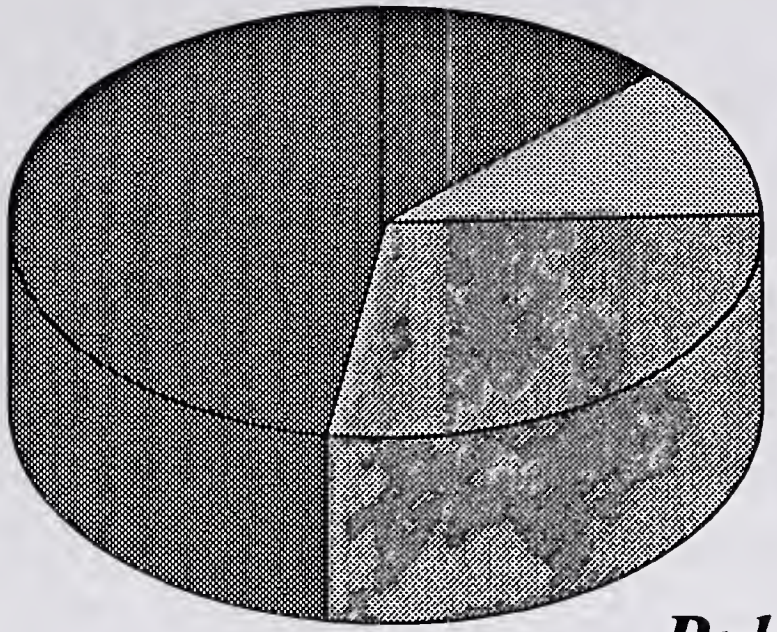
Sources of Revenue to Support Financed Project Costs	**Amount (millions)**
Public Sources	
Commonwealth G.O. and Appropriations	**$29.0**
Private Sources	
Hotel Room Fee per night -range $.75 to $1.75	**$23.4**
Rental Car Fee per contract @ $2.50	**11.0**
Cruises, Trolleys and Tour Buses[1]	**1.0**
Sports Facility Events 10% Ticket Surcharge[2]	**5.9**
Other Facility Events 10% Ticket Surcharge	**1.5**
Stadium Parking Fee @ $1 for Game day and Events	**2.5**
Patriots' Lease Payment	**5.0**
Subtotal of Private Sources	**$50.3**
Total Sources	**$79.3**

[1] Fee does not apply to shcool groups utilizing Trolleys.
[2] Fee does not apply to tickets of $10 and below.

Massachusetts Megaplex Commission

Source of Funds for Construction of Facility

Private 60%



Corporate 12%

Public 28%